**SUPPORTING DOCUMENT FOR THE
HISTORICAL TANK CONTENT
ESTIMATE FOR**

BX TANK FARM

WORK ORDER ER4945

Prepared for

Westinghouse Hanford Company

June 1994

Prepared by

**ICF Kaiser Hanford Company
Richland, Washington**

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7. Abstract This Supporting Document provides historical in-depth characterization information gathered on BX-Tank Farm, such as historical waste transfer and level data, tank physical information, temperature data, sampling data, and drywell and liquid observation well data for Historical Tank Content Estimate Report of the NE Quadrant and the Hanford 200 East Areas.		
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for

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	<u>9/28/94</u>		<u>9/28/94</u>
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INFORMATION FEEDBACK CARD

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1.0 Introduction

1.1 Purpose

This document provides historical evaluations of the radioactive mixed wastes stored in the Hanford Site 200-East Area underground single-shell tanks (SSTs). A Historical Tank Content Estimate has been developed by reviewing the process histories, waste transfer data, and available physical and chemical characterization data from various Department of Energy (DOE) and Department of Defense (DOD) contractors.

The historical data will supplement information gathered from in-tank core sampling activities that are currently underway. A tank history review that is accompanied by current characterization data creates a complete and reliable inventory estimate. Additionally, historical review of the tanks may reveal anomalies or unusual contents that are critical to characterization and post characterization activities. Complete and accurate tank waste characterizations are critical first steps for DOE and Westinghouse Hanford Company safety programs, waste pretreatment, and waste retrieval activities.

1.2 Scope

The scope of this document is limited to the SSTs in the BX Tank Farm of the northeast quadrant of the 200 East Area. For summarized characterization data on all SST's in the northeast quadrant, refer to the Historical Tank Content Estimate Report (Brevick 1994). The northeast and southeast quadrants represent an approximate geographical division of the 200-East Area tank farms. The division was made as follows:

- NE Quadrant: A, AX, B, BX, BY, C
- SE Quadrant: AN, AZ, AP, AW, AY, SY

The following map depicts the 200-East Area.

1.3 Approach

This report is a compilation of work performed by ICF Kaiser Hanford Company, Los Alamos National Laboratories, and Westinghouse Hanford Company.

Westinghouse Hanford Company requested that ICF Kaiser Hanford Company review the history of the tanks in each of the four quadrants and incorporate the tank layering models and inventory estimates being developed by Los Alamos National Laboratories into the report. Historical waste transfer and level data, tank physical information, temperature data, sampling data, and drywell and liquid observation well data have been compiled for this report.

200 East Area

1.3.1 Surveillance Techniques for the Hanford Radioactive Mixed Waste Storage Tanks

Surveillance information is used for tank characterization. Tank integrity (i.e., sound, assumed leaker, assumed re-leaker) is investigated by comparing the changing liquid levels to liquid observation well data and drywell activity. Waste temperatures can be used to correlate the inventories of heat-generating radionuclides (^{137}Cs and ^{91}Sr) in the tanks. The instrumentation and methods used for tank surveillance are described in the following sections.

■ In-Tank Surface Levels

Surface levels within the SSTs are monitored by instruments consisting of calibrated steel tapes with an electrode plummet on the end that will complete a circuit when it contacts a conducting surface (i.e., liquid). The surface level measurements are usually taken with Food Instrument Corporation gauges and manual tapes. The tank monitoring device, manufactured by the Food Instrument Corporation, automatically moves up and down and contacts the waste. The gauge is often set to the intrusion mode by placing the plummet a short distance above the waste. If an intrusion occurs in the tank, the Food Instrument Corporation gauge will record the event when the surface level rises to meet the plummet. The manual tapes are similar to the Food Instrument Corporation gauge, except that manual operation of the tape and manual recording of the readings are required. Some tanks contain both types of level monitoring devices. The measurements are recorded on a computer automated surveillance system (CASS).

■ Interstitial Liquid Level (Liquid Observation Wells)

Food Instrument Corporation gauges and manual tapes are limited to surface level measurement; therefore, liquid observation wells in many tanks have been installed specifically to monitor the interstitial liquid level within the SSTs. The interstitial liquid is the liquid trapped within and underneath the solid waste. Fiberglass or TEFZEL-reinforced epoxy-polyester resin liquid observation well tubes (by E.I. du Pont de Nemours and Company) are sealed on the bottom and vertically installed approximately 1 in. from the tank bottom. Gamma, neutron, and acoustic probes may be lowered into the liquid observation wells to determine the interstitial liquid levels within the tank. A gamma probe detects the difference between saltcake and saltcake containing liquid, based on the principle that the liquid is the primary source of gamma emissions. A neutron probe distinguishes between the existing dry saltcake, wet saltcake, and liquid phases. Distinct differences exist in the neutron count rates of each material type. An acoustic probe emits a pulse that is reflected off the interface between the outer wall of the liquid observation well and the waste. A fiberglass/liquid interface produces a minimal reflected pulse and a fiberglass/air interface produces a maximum pulse reflection. Wet saltcake will fall between the limits appropriately; therefore, interpretation of the records will determine the liquid level. Each probe scan is fully automatic and

successful scans are input to the computer automated surveillance system.

■ **Internal Tank Temperatures (Thermocouples)**

Temperatures usually are recorded automatically in the Computer Automated Surveillance System (CASS). Temperatures are monitored with thermocouple trees that are comprised of stainless steel pipe with 4 to 18 thermocouples. Usually, the lowest sensor is located approximately 4 in. from the tank bottom and the other sensors progress up the tree at 2-ft intervals. More frequent temperature readings are available for a few select tanks due to an upgrade in the surveillance data acquisition system to the tank monitor and control system (TMACS) in 1991.

Generally, a single thermocouple sensor is sent down the liquid observation well to take semiannual readings in tanks that do not contain a thermocouple tree. The temperatures are recorded manually in degrees Fahrenheit and are entered into the surveillance analysis computer system (SACS) that is currently using the ORACLE database.

■ **External Leak Detection (Drywells)**

Drywells are located around the circumference of each SST and throughout the tank farms to determine if tank wastes have leaked. The drywells are generally 6-in. diameter carbon steel pipe, between 75- and 250-ft deep. The wells are termed dry because they are not deep enough to reach ground water. Scan profiles of radiation or moisture in the soil as a function of well depth are obtained with gamma radiation or neutron sensors. Scintillation monitors, Geiger-Mueller instruments, and neutron sensors are used to monitor the drywells. Scintillation monitors are radiation detection instruments based on the principle that light pulses are produced in some materials when they are exposed to radiation. Geiger-Mueller instruments detect low-level beta and gamma radiation. Neutron probes are equipped with a neutron source and detector that determine if moisture is present in the soil. The frequency of and probe used for drywell monitoring are specified in a schedule from the "Waste Storage Tank Status and Leak Detection Criteria" (Welty 1989).

Drywell readings are recorded at 1-ft intervals. The peak readings and the depth of the readings are recorded on a summary sheet. If a drywell indicates a new or unusual increase in activity, a rerun is requested and the drywell is retested. The wells are sealed when they are not being tested.

The drywells described in this report have a 6-digit computer identification number: the first two digits denote the tank farm (i.e., A=10, AX=11, B=20, BX=21, BY=22, and C=30), the third and fourth are the last two digits of the tank number (i.e., 241-A-105 would be 10-05 and 00 indicates a non-specific tank), and the fifth and sixth describe the clockwise location of the well from due north. For example, the identification number of the first drywell for Tank 241-BY-102 would be 22-02-01.

Laterals (i.e., horizontal drywells) are positioned under some SSTs to detect radionuclides in the soil which could be indicative of tank leakage. The drywells are monitored by radiation detection probes and occasionally by a temperature probe. Laterals have 4-in. inside diameter steel pipes located 8 to 10 ft below the concrete base of the tank, and each tank has three laterals. Laterals are located only in the A Tank Farm and a portion of the SX Tank Farm.

■ In-Tank Photography

In-tank photography is another waste volume determination method used to resolve in-tank measurement anomalies and determine tank integrity. Photographs can help determine sludge and liquid levels, provide a degree of corroboration with other waste management processes, and are a source of information on foreign objects contained in the tanks. The photos can be compared to see if tank wastes with similar histories have similar characteristics.

1.3.2 Approach and Development of Supporting Information Contained in the Historical Tank Content Estimate and Supporting Documents

Extensive information was gathered for each tank. This document contains a comprehensive data set on each tank, that are summarized in the Historical Tank Characterization Estimates.

■ Tank Level Histories

The tank level histories are graphical representations of waste levels over the lifetime of a tank. They include information such as pH, in-tank photo dates, waste types, transfer data, and physical data. Information from the mid 1940s to 1980 was compiled from two Westinghouse Hanford Company documents (Anderson 1990 and Welty 1988). Data from 1977 to the present were obtained from the monthly waste status summary reports. The following Hanford Site operating contractors prepared summaries: Atlantic Richfield Hanford Company from 1973 to 1977, Rockwell Hanford Operations from 1977 to 1987, and Westinghouse Hanford Company from 1987 to present. Script files were imported from a spreadsheet to AutoCAD 12 to graph the surface level data. Liquid observation well data were obtained from the Westinghouse Hanford Company Tank Farm Surveillance group in a spreadsheet format. Additional information was gathered from various documents and comments were added directly to each drawing.

The liquid, solid, and interstitial liquid levels (liquid observation wells data) are shown on the tank level history graphs as volumes and tank elevations. The following formulas were used to relate the volumes to the respective elevation for each tank farm design:

FORMULAS

$$\frac{\text{Total Gallons}}{2750 \frac{\text{Gallons}}{\text{Inch}}} = \text{Total Inches} \quad (1)$$

$$\frac{\text{Total Gallons} - 12,500 \text{ Gallons}}{2750 \frac{\text{Gallons}}{\text{Inch}}} + 12 \text{ Inches} = \text{Total Inches} \quad (2)$$

$$\frac{\text{Total Gallons} - 12,500 \text{ Gallons}}{2750 \frac{\text{Gallons}}{\text{Inch}}} = \text{Total Inches} \quad (3)$$

$$\frac{\text{Total Gallons} - 18,500 \text{ Gallons}}{2750 \frac{\text{Gallons}}{\text{Inch}}} + 12 \text{ Inches} = \text{Total Inches} \quad (4)$$

$$\frac{\text{Total Gallons} - 590 \text{ Gallons}}{196 \frac{\text{Gallons}}{\text{Inch}}} + 6 \text{ Inches} = \text{Total Inches} \quad (5)$$

Equation No.	Applicable Tank Farms:	Tank Diameter
1	A, AN, AP, AW, AX, AY, AZ, SY	75 ft
2	BY, S, TX, TY	75 ft
3	B, BX, C, T, U	75 ft
4	SX	75 ft
5	B, C, T, U (200 Series)	20 ft

■ Temperature Plots

There are two categories of temperature data, one or few temperature readings per day and thermocouple temperature data. The documentation used for the first category includes Waste Status Summary Reports (Roberts, R.E. 2/58 - 10/58, Thress, M.A. 11/58 - 2/59, Lentz, J.E. 3/59-12/60, and Roberts, R.E. 6/61 - 6/62), RHO-CD-1172, and HW-83906. The thermocouple temperature data were obtained from the Westinghouse Hanford Company ORACLE database commonly known as the Surveillance Analysis Computer System (SACS) and various retrieved hand-entered temperature data sheets. Temperature versus time plots were developed for both categories of temperature data. Historical temperature plots cover the time span between January 1957 and January 1973. The common temperature span used for these plots is 350 degrees. There are no tanks that have temperature data outside the sliding 350 degree temperature range.

No thermocouple information has been located prior to 1973. The thermocouple temperature information was parsed in an EXCEL spreadsheet and graphed to show each individual thermocouple probe. January of 1973 is then the starting date for all thermocouple plots. The temperature range for all tank thermocouple plots in all tank farms was kept to a 120 degree F span, except where the data exceeded this range. In the few tanks where the temperature span exceeds this sliding range the data are shown using the smallest temperature range possible. A consistent time frame and temperature range is essential in comparing temperature information from one tank to another. If documentation was available, thermocouple elevations were included in the plots for tanks currently containing thermocouple trees. Thermocouples are ordered from the bottom to the top of the tank. Therefore, a plot of thermocouple 1 over time would indicate the temperature near the bottom of the tank. In-tank temperature information is available in Appendix D.

■ Surface Level Plots

The surface level data from 1991 to 1993 were obtained from the Westinghouse Hanford Company ORACLE database. The information was parsed in an EXCEL spreadsheet and graphed to show the waste level versus time. Current in-tank surface level information is available in Appendix E.

■ Drywell Plots

The drywell information was obtained from the manual records of the Westinghouse Hanford Company Tank Farm Surveillance Group. Data from 1990 to the present were input into an EXCEL spreadsheet and graphed to show the peaks in counts/second (c/s) and the peak depths in feet (ft) versus the date on the same chart. Tank drywell information is available in Appendix F.

■ Tank Profiles and Other Drawings

The drawings included in this report have been compiled from several sources including as-built drawings, the Waste Storage Tank Status and Leak Detection Criteria (Welty 1988), and the Riser Configuration Document for Single-Shell Waste Tanks (Alstad 1991).

The risers and penetrations throughout the tank dome are used for many purposes. Some risers were installed during the original tank construction and others were added later.

Through the years, sleeves or smaller risers were installed in many of the larger risers. For the riser configurations in this report, a tank may have a riser number followed by a letter which means that a larger riser was fitted with smaller sleeves. Depending on the intended use, the riser sleeves can be as large as 12 in. or as small as 4 in. For example, a saltwell pump and screen require a 12-in. riser but a thermocouple tree requires only a 4-in. riser. The tank profile drawings are in Appendix K.

■ Photographs

The tank farm photos were labeled to indicate the relative position of each tank in the farm and arrows were added to show the cascade series of each tank farm.

The latest in-tank and tank farm photos were obtained from Pacific Northwest Laboratory. In-tank photos have been arranged to show the contents of each tank. The auxiliary equipment within each photo collage was identified if possible and labeled appropriately. The latest in-tank and tank farm photos are available in Appendix I.

■ Historical Sample Analysis Data

The sampling data were obtained from the WHC Tank Waste and Retrieval Group. Tables were made for the samples that were taken prior to September 1989. The information was compiled in EXCEL to present the data in as similar a manner as possible. The tables include physical data, chemical analysis data by component, and radiological analysis data by component. Any other data included with the sample references are summarized as text. Tank historical sample analysis data are available in Appendix H.

1.3.3 Approach and Development of the Process-Based Historical Tank Content Estimate

The process-based historical tank content estimates presented in this report were taken from work being performed by Los Alamos National Laboratories. The tank content estimates are the primary source of tank characterization data until the tank characterization reports are completed. The tank characterization reports will incorporate current core sampling and analysis results with historical-based tank content estimates to present the most current evaluation of the tank waste constituents.

Generating historical tank content estimates involves management and evaluation of large quantities of data. Several smaller components of the data management effort make up the system of generating historical tank estimates. The components are described in the following sections.

■ Waste Status and Transaction Record Summary Database

The waste status and transaction record summary database (i.e., transaction summary) is a database of all known waste transfer records. Historically, when waste was pumped from a process plant to tank or tank to tank, a record of the pumped waste volume and type was kept. The transaction summary is the recorded waste level of the solids and supernatant.

The waste status and transaction record summary database is being partitioned into four separate sections (i.e., quadrants). The waste status and transaction record summary database for the northeast quadrant is available in WHC-SD-WM-TI-615 Rev. 0 (Agnew 1994).

■ Tank Layering Model

The tank layering model is derived from the waste status and transaction record summary database. The purpose of the tank layering model is to predict the waste types and volumes in each tank. The transaction summary database records the types of waste that enter each tank and the corresponding increase in the solids volume from each waste entry. Each waste type that increases the solids volume in the tank is recorded in the tank layering model. Therefore, the completeness and accuracy of the information in the tank layering model is directly related to the completeness and accuracy of the transaction summary database.

The tank layering model was created to develop historical tank content estimates. The results of the tank layering model are reported in this document. The tank layering model is presented graphically with the inventory estimate described below in Appendix K.

■ Defined Waste Types

Early in the development of the historical tank content estimates, a need to compile the chemical compositions of all known waste types into one source document was recognized. This compilation was performed by Los Alamos National Laboratories. The Hanford defined waste document was developed independently of the waste status and transaction record summaries database and the tank layering model. However, the Hanford defined waste list will be used with the tank layering model to obtain the actual tank waste inventory estimates as described below.

The Hanford defined waste document gives the compositions for all known Hanford waste types that went into the double-shell and single-shell tanks. For more details of the methods used to develop these waste types, refer to the Hanford Defined Wastes Document (Agnew 1994).

■ Inventory Estimates

The end result of combining the tank layer model and the Hanford defined waste types is the tank inventory estimate. When the volumes and compositions of each waste type in a particular tank are known from the tank layering model and the Hanford defined

wastes document, a calculation of the total chemical inventory in the tank is performed. The individual tank results are presented in tabular form in Appendix K.

The inventory estimates developed by Los Alamos National Laboratory are quality checked against existing data from current sample analyses, thermal and physical models, and historical records. The checking constitutes a large portion of the time required to develop the estimates. When estimates are checked against existing data, the models used may be reevaluated. Thus, the process of generating estimates will iterate and the associated errors will be reduced over time as the historical knowledge of the tank waste operations increases.

1.3.4 Assumptions

The quality of the historical information available for the tanks often requires that assumptions and judgement calls be made on the applicability and validity of the data. Some assumptions were used to interpret the data.

■ Temperature Data

The lines joining the data points on the temperature plots were detached to show gaps in data of more than three years.

The single thermocouple tree in some tanks was removed and replaced with two trees. The original single thermocouple tree and tree 1 data were plotted on the same graph, and the tree 2 data were graphed separately.

No conclusion has been made on the status of thermocouples with less than 5 data points. In general, when there is thermocouple data with less than 5 data points, the data are retained on the temperature data sheets, but have not been plotted. Some possible explanations for the limited data are that the thermocouple failed, it was inoperable when readings were taken, or the operator misrepresented the number of thermocouples and the temperature data in the tank.

The thermocouples used in the trees were installed as purchased. There were no field calibrations before 1991. In 1991, a survey of Ferrocyanide Watch List thermocouple trees was conducted. The thermocouple tree probe temperatures were tested against probes inserted in liquid observation wells or by other methods as specified in Engineering Evaluation of Thermocouples in FeCN Watch List Tanks, (Bussell 1992). Thermocouples, with equipment that could be repaired outside the tank, were made operable at this time.

It is assumed that the sinusoidal variances in the data can be attributed to seasonal and diurnal trends which are clear after 1991 due to an upgrade in thermocouple surveillance to a computerized data acquisition system, i.e., Tank Monitor and

Control System (TMACS). Also, in general, the temperatures decrease from the bottom to the top of the tanks.

All the temperature data received by ICF Kaiser Hanford Company was reviewed for suspect data points. Data that obviously deviate from the temperature trend for a any tank are marked as suspect and designated in the comment column as either "suspect data (low)" or "suspect data (high)". Typically, suspect data sharply deviates from the data trend 15 degrees F or more (See historical and thermocouple temperature data in Appendix D - Temperature Graphs and Data).

After review of the data, it was determined that some data was recorded in degrees Celsius rather than in degrees Fahrenheit as it was electronically received. The data are converted to Fahrenheit and evaluated against the rest of the data set. Where the converted data are found to be consistent with the temperature trend, they are designated in the comment column as "raw data - assumed degree C". Other delineations used to flag suspect data or substantiate the degree Celsius conversions are found from the Tank Waste Information Network System (TWINS) database, property of Battelle - Pacific Northwest Laboratory. Data recorded in degree C or input incorrectly and confirmed with TWINS are delineated in the comments column as: "degree C/TWINS confirm" and "wrong input/TWINS confirm", respectively (See historical and thermocouple temperature data in Appendix D - Temperature Graphs and Data).

In addition, some of the lines of data were flagged in the comment column by Westinghouse Hanford Company (WHC) before transmission of the data. Some of the WHC comment flags include "cass" or "SET#2 FROM CASS". It is assumed that "cass", an acronym for Computer Automated Surveillance System, applies to all the data taken on that particular day, and that "SET#2 FROM CASS" applies to the contiguous data designated under the TREE SET # column as 2 (See historical and thermocouple temperature data in Appendix D - Temperature Graphs and Data).

Sources of temperature data are located in the footnotes of both the temperature plots and data. Some Historical Temperature plots use data from Waste Status Summary Reports (Roberts, R.E. 2/58 - 10/58, Thress, M.A. 11/58 - 2/59, Lentz, J.E. 3/59-12/60, and Roberts, R.E. 6/61 - 6/62). If these reports are used, footnotes on the temperature plots indicate by including the source of data concisely as from "Waste Status Summary Reports" (See historical temperature plots in Appendix D - Temperature Graphs and Data).

■ Drywell Data

The drywell data did not appear to have had a quality review; therefore, the following assumptions were made about the data:

-A data point is considered suspect if an apparent rerun has been performed.

-A data point is considered to be a rerun if the preceding data are erratic and the rerun is performed on the same day if monitored daily, within one or two days if monitored weekly, or within several days if monitored monthly or yearly.

-If suspect data were indeed relevant, the appropriate surveillance organizations would have followed the appropriate procedures to identify any problems.

■ **Sampling Data**

The data obtained from the historical analytical information are understood to be widely variable in type, quality, and scope. The data range from process control data obtained from a grab sample on a few selected analytes to a total characterization suite performed on a core sample. There are no specific quantitative data quality criteria for the information incorporated into the historical tank content estimate. A qualitative assessment of the information sources is done during construction of the historical tank content estimate. The available data are assessed for suitability and consistency in the study and each data source is weighted appropriately for its contribution to the overall estimates.

When the sampling data were compiled, a sample was considered a solids sample if it was greater than 30% solids. Sludge/slurry samples were included.

■ **Inventory Estimates**

Solid waste formations vary by type and are determined individually by examination of the historical fill records. Further refinement and bounding of the solids formation are provided by conformation to physically attainable systems (e.g., waste volumes contained in the tanks do not exceed the tank capacity and negative void fractions are not possible).

Waste stream compositions were based on process flow sheet information and previous analytical data.

Solids were evenly distributed throughout tank. The solids were assumed to be evenly distributed throughout the slurry during their transfer and their settling rate was assumed to be uniform throughout the tank.

Complete settling of the sludge occurred and the solids settled in a pseudo-pancake formation (i.e., flat layers conforming to the boundaries of the tank) which was a simplifying assumption. Localized mounding and pocketing in various areas of the tank may have occurred due to inlet/outlet phenomena (e.g., cascades and transfers from the floating suction pumps that remove or deposit sludge). This phenomenon would have affected only a small fraction of the tank area and does not impact the overall results of this study. However, spatial variability within physical configuration and process history is acknowledged. No method is currently available that would adequately model this discrepancy. An effort

is underway to develop this concept and incorporate it into the tank characterization process, but it is incomplete at this time.

Solids from a specifically designated waste type are homogeneous, which is a simplifying assumption. Variation and layering of the sludge due to component concentration differences between batches, precipitate particle size, and particle density were quite likely. The effect of these factors on the distribution of analytes within the solids is unknown; however, the effect was probably small and not detectable with the present sample collection and analysis process.

Solids compaction did not occur and was not accounted for in the study which is a simplifying assumption. Although compaction probably occurred in the history of the tanks because of the formation of additional solids layers on top of each other, the degree of compression was not known and, therefore, was not incorporated.

Density and other physical characteristics of the solids were determined by individual waste type using available information or were based on approximate physical analogues.

The capacity of the tanks was never exceeded during transfers. Tank capacity is dependent on fill status, fill order, tank location in a cascade, and tank type.

Leaking of the tanks was not incorporated during the time of the study but was accounted for at the end.

Cascades, tank transfers, and crib line effluents were normally free of particulate; therefore, the majority of solids were confined to their initial receiver tanks and were not cribbed or transferred extensively from tank to tank. This assumption based on cases of plugged cascade lines when appreciable amounts of solids tried to cascade, and the pumping equipment typically was not designed to transfer of substantial quantities of solids (except when sluicing or specifically transferring solids). Monitors on the crib discharge lines should have indicated significant solids contamination, and the tank farm operating procedures would have prevented solids discharges to the ground.

1.4 Historical Information Quality

The quality of historical data compiled for this report varied greatly. Some data came from published documentation. Other data were retrieved electronically from various Westinghouse Hanford Company databases. The quality of data used in the estimates is described in the following section.

■ Level Histories

The level history narrative is designed to give a general description of the waste types contained in a specific tank from startup to the present. The history presents physical

characteristics of the waste such as waste pH values and the latest maximum temperature of the waste. It also presents information on when the tank was removed from service, if it was stabilized, the method of stabilization, if it ever leaked, and the current stabilization status. It is not designed to be a detailed summary of every waste type and transaction for that tank. The waste types are general and usually are given only for large transactions (i.e., if a waste is not of sufficient volume to significantly impact the total volume of the tank then it was not reported in the narrative). For a more complete record of transactions and types of wastes involved, see the waste status and transaction record summary (Agnew 1994).

The accuracy of the tank level histories relies on the completeness of the Westinghouse Hanford Company document "A History of the 200 Area Tank Farms" (Anderson 1990); the monthly Westinghouse Hanford Company, Atlantic Richfield Hanford Company, and Rockwell Hanford Operations waste summary reports; and the waste status and transaction record summary (Agnew 1994).

Surface level readings may be affected by several factors: plummet error, flushing water accumulation, and waste surface irregularities. Crystalline wastes (i.e., saltcake) can build up on the end of the plummet gradually and contact the waste which indicates a false surface level increase. Significant level discrepancies occur when the buildup breaks off or when the measuring instrument plummet is flushed to remove the saltcake buildups. Flushing the Food Instrument Corporation Gauge, manual tapes, or any other equipment may cause accumulated wash water to collect under the plummet which indicates a false increase in the overall volume of waste within the tank. Surface level readings often are difficult to obtain from tanks that have a relatively dry saltcake surface. Some tanks have crystalline buildup on in-tank equipment (i.e., pumps, thermocouples, liquid observation wells, and other protruding equipment). As the supernatant is pumped from the tanks, the crystalline structure may remain attached to the equipment and be suspended above the liquid. Therefore, an accurate surface level measurement would be difficult if the breakup of the crystalline structure was inconsistent and a nonuniform waste surface was created. Steel tapes that are bent or warped from operation or those discarded on the waste surface are other sources of altered surface level readings.

Routine measurements of solids and sludges in most SSTs were not reported in the Anderson document until 1965. The solids measurements are taken with a steel donut on a string and operators interpret the sludge level. The interpretation could introduce a wide range of variability in the recorded solids level. Sometimes estimates taken from photographic data and saltwell pumping activities are the only indications of the solids levels.

■ Liquid Observation Well Data

The liquid observation well data were obtained electronically from the Westinghouse Hanford Company Surveillance Group. Some

discrepancies exist in the liquid observation well readings for tanks with liquid waste surfaces. The discrepancies were supposed to be addressed in a December 1993 rebaselining of the liquid observation well data. Agreement between the liquid observation well plots and the data obtained from the surveillance group has been verified; however, errors in the data prior to the exchange of information could still exist. The liquid observation well data were understood to be unverified prior to the exchange. Therefore, the data should be reviewed before being used for any design purposes or safety evaluations.

■ Temperature Readings

The single-shell tank temperature profiles are provided by electronic data from Westinghouse Hanford Company. Agreement between the thermocouple plots and the data obtained from the surveillance group has been verified; however, errors in the data prior to the exchange of information could still exist. Thermocouples used in the thermocouple trees were purchased and installed according to the American Society of Testing and Materials (ASTM) standard. There were no field calibrations before 1991 when a survey of Ferrocyanide Watch List thermocouple trees was conducted and a few of the thermocouple trees were compared against a thermocouple probe inserted in a liquid observation well.

During a review of the plots, some thermocouples were found to have outlying data points and many of them have only one or two readings. The unusual readings may be the result of the thermocouples functioning on only one occasion, the operator misrepresenting the number of thermocouples in the tank, unnecessary thermocouples readings, or possible thermocouple failure.

Occasionally the operator would read the temperature in degrees celsius instead of degrees fahrenheit and would not indicate this on the data sheets. The thermocouple data were understood to be unverified prior to the exchange. An attempt has been made by ICF Kaiser Hanford to validate and verify the data, however, the data should be checked before being used for any design purposes or safety evaluations.

■ Surface Level Data

The surveillance automated computer system data were obtained electronically from the Westinghouse Hanford Company Surveillance Group and were plotted. The data are actual surface levels recorded from the surveillance equipment. If the surveillance equipment in a particular tank riser was removed from service, the readings may show a level change when a new instrument and/or riser is used, especially if the waste surface shows severe heterogeneity.

Agreement between the plots and the data obtained from the surveillance group has been verified; however, errors in the data prior to the exchange of information could still exist. The surveillance automated computer system data were understood to be

unverified prior to the exchange. Therefore, the data should be reviewed before being used for any design purposes or safety evaluations.

■ **Drywell Data**

The drywell information is received on data sheets for each drywell. If the readings are questionable, Westinghouse Hanford Company often will request a rerun of the drywell scan. Because the reruns are not indicated on the data sheets, it can be difficult to determine if the data sheet has been superseded. In some wells, several scans occurred on the same day with no explanation; therefore, the scan with the accepted results is not identifiable.

■ **Riser Configuration**

The riser configuration was determined from the WHC Riser Configuration Document for Single-Shell Waste Tanks (Alstad 1991). The information was current as of June 1991; therefore, any changes made after that date would not be included.

■ **Photographs**

The photo collages were made from the latest available in-tank photographs. In some tanks, photos have not been taken since the early 1970s. Some tanks had fogging problems in the vapor space which prevented use of the latest photos. Sometimes a review of the older photos was useful to determine the waste changes. Collages made from older photos may not be indicative of current tank contents, especially if the tank has been pumped since the last photo date.

■ **Historical Sample Analysis Data**

The historical sample results only refer to sample and analysis information obtained before August 1989. The historical sample and analysis results have not been validated by the characterization program. When validation occurs, they will be reissued in a later revision of the Historical Tank Content Estimate report and supporting documentation. The sample data often were retrieved from memos that indicated the results of the sample analysis. The analytical methods, holding times, and quality control information are unavailable. The location at which the sample was taken was not provided which leads to integration of some uncertainty into the sampling results. The analytical scope performed in many cases was quite narrow which limited the available data set. However, the data set is the only available historical chemical characterization information.

1.5 Background NE Quadrant

The SSTs located on the Hanford Site near Richland, Washington were built between 1943 and 1964 to provide interim storage for high-level nuclear wastes. Processes such as plutonium separation from spent nuclear fuel and uranium metal recovery generated the millions of gallons of mixed radioactive hazardous waste solutions stored within these tanks.

Several waste tanks are on watch lists. The definition of a watch list tank is explained in a later section of this report. Wastes stored in the NE quadrant were generated mostly from Plutonium Uranium Extraction (PUREX) and a Bismuth Phosphate Plant (B Plant); however, some tanks in the quadrant received wastes from the other onsite separation processes. The separation processes went through many changes as new technologies became available. Liquid waste volumes were reduced by evaporators, in-tank solidification units, or chemical precipitation of radionuclides. The resulting supernatant was disposed of in the ground. Vaults were used for temporary storage or treatment of waste and they were the intermediate storage point for tank waste or waste awaiting further processing. A special rail car facility in the NE quadrant was used to unload onsite waste that was distributed to an evaporator, tanks, or processing facilities. The facilities were sources of the waste that exists in the SSTs of the NE quadrant.

1.5.1 Waste Generating Processes

Although not all of the processes listed below contributed waste directly to tanks in the NE quadrant, the waste they generated could have been indirectly transferred to the quadrant through tank to tank transfers. The plants and processes that generated waste now contained in the SSTs and the DSTs are presented in chronological order.

■ T Plant

T Plant was the first-full scale separations plant at Hanford. It was constructed in 1944 and was used as a separation facility for irradiated production reactor fuel until 1956. The bismuth phosphate separation process used at T Plant was identical to the one used at B Plant. Since 1957, T Plant has been used as a decontamination and repair facility. The facility was modified in 1978 for storage of pressurized water reactor (PWR) core II fuel assemblies. T Plant provided facilities for decontamination, decomposition, repair, testing, shipping, and burial of contaminated tools and equipment from onsite and offsite locations.

The following wastes were sent to SSTs: waste solution from equipment decontamination efforts at T Plant, decontamination waste (DW), metal waste (MW) from the bismuth phosphate process, first-cycle (1C) decontamination waste from the bismuth phosphate process, and second-cycle (2C) decontamination waste from the bismuth phosphate process.

■ B Plant

B Plant was constructed between August 1943 and February 1945. The bismuth phosphate process ran until 1952. One of the first plants built along with T Plant, B Plant was designed to separate plutonium from uranium and the bulk of fission products in irradiated fuel via the bismuth phosphate separation process. In 1968, B Plant became a waste fractionation plant and was retrofitted to remove cesium 137 and strontium 90 from PUREX acid

waste, high-level supernatant liquids, and sludge from self-boiling liquid wastes.

B Plant contained 40 processing cells that served several functions (e.g. equipment storage, radionuclide purification, liquid waste concentration, and solvent extraction). Cells 5, 23, 24 and 25 were used as liquid waste concentrators for the B Plant processing. Cell 23 of B Plant was used as a waste concentrator from July 28, 1967 to February 2, 1968. Because B Plant was being upgraded to a waste fractionation plant, the Cell 23 concentrator was running specifically to concentrate intermediate level waste in the single-shell tanks.

In 1974, the Waste Encapsulation and Storage Facility (WESF) was added to B Plant to encapsulate strontium and cesium that was recovered from the B Plant process. The cesium capsules were leased commercially for irradiation of food, medical supplies, and lumber. The strontium and cesium capsules are stored in water basins for future retrieval. Currently most of B Plant is going through closure except for the plant sections that are needed to support the WESF mission. The closures result from a 1991 evaluation of the future B Plant mission.

The following B Plant waste streams were sent to SSTs: B Plant high-level waste (B), B Plant flush (BFSH), low-level waste from the waste fractionation plant (BL), complex concentrate (CC) or (CCPL), complexed waste (CPLX), fission products waste (FP), metal waste (MW), REDOX ion exchange waste processed at B Plant (RIX), ion exchange (IX), strontium sludge (SRS), cell 5 tank 6 waste (5-6), first-cycle waste (1C), and second-cycle waste (2C).

■ Bismuth Phosphate Process

The B and T Plants used a bismuth phosphate extraction to remove plutonium from uranium fuel elements. The extraction waste that resulted was a metal waste that still contained 90% of the fission products and 99% of the original uranium. The metal waste was sent to specific tank cascades in the 200-East and 200-West Areas. First-cycle decontamination waste (1C), which contained approximately 10% of the fission products, was also stored in other underground waste tanks in the 200 Areas.

■ Plutonium Finishing Plant

The Plutonium Finishing Plant (PFP or Z Plant), previously called Plutonium Recovery and Finishing Operations, began operation in late 1949 to process plutonium and prepare plutonium products. PFP operations included plutonium handling, plutonium reclamation, plutonium conversion, and decontamination and decommissioning.

Waste from this plant contained minor amounts of fission products and low concentrations of plutonium and other transuranic elements, but was high in metallic nitrates. Initially, the waste was discharged via cribs to soil columns, which absorbed the transuranic elements and retained them close to the point of

discharge. Later waste from Z plant was stored along with other waste in underground tanks.

The following waste was sent to tanks: waste from the Plutonium Reclamation Facility and the remote mechanical C line (Z).

■ Uranium Oxide Plant

The 224-U Building was completed in 1944 as part of the U Plant complex. The building was converted to a UO_3 plant in 1951. The 224-UA building was constructed in 1957 with six installed calciners. The UO_3 plant was able to handle the uranyl nitrate hexahydrate (UNH) stream from REDOX, U Plant, and PUREX. The UO_3 plant shut down in 1972 and restarted in 1984 with the feed lines from REDOX and the U Plant canyon disconnected. Since 1984, there have been 17 campaigns at the plant that averaged 8 days each. The plant can calcine UNH much faster than the PUREX plant can produce it. Final deactivation was ordered for the plants in 1992. In April 1993, the UO_3 plant resumed operations to convert 200,000 gal of remaining UNH to uranium oxide powder. A final deactivation plan for the facility was prepared in the summer of 1993 and will be carried out in the next few years.

In the basic UO_3 process, calcining consisted of concentrating and heating liquid UNH until it was converted to a stable orange-yellow powder. The nitric acid in the UNH solution was also recovered in the same process. The UO_3 powder was the base material needed to manufacture uranium hexafluoride (UF_6) which is the primary feed material for gaseous diffusion plants in the United States.

■ REDOX

The Reduction and Oxidation extraction (REDOX) plant was built between May 1950 and August 1951 and operated until July 1967. Uranium and plutonium were extracted from solid uranium metal slugs that were irradiated in the Hanford reactors or piles into a methyl isobutyl ketone (hexone) solvent by a continuous solvent extraction process. The REDOX process was the first at Hanford to recover both plutonium and uranium.

The waste stream which was slightly acidic contained fission products and large quantities of aluminum nitrate that were used to promote the extraction of plutonium and uranium. The waste was then neutralized and stored in SSTs.

The following wastes were sent to SSTs: REDOX process waste resulting from the dissolution of aluminum and zircaloy fuel element cladding, REDOX coating waste (CWR); REDOX high-level waste (R), and the supernatant liquid portion of waste generated by the REDOX process, REDOX supernatant (RSN). RSN is found above the sludge in the underground storage tanks.

■ U Plant

U Plant (221-U) was built as one of three original bismuth phosphate process facilities although it was not used for that purpose. U Plant was modified extensively and used for the uranium recovery process. U Plant operated from 1952 to 1958. The main canyon at U Plant currently stores failed equipment.

Uranium in waste from the BiPO_4 process initially was stored in the SSTs. Later it was mined by sluicing, dissolved in nitric acid, and processed through a solvent extraction process. For every gallon of metal waste originally stored, the uranium extraction process yielded approximately 1.4 gal of UR waste. The waste volume increase made development of a technology that would reduce the volume of the stored waste a priority. This need resulted in the development/implementation of the ferrocyanide scavenging process.

The waste sent to the SSTs from U Plant was called tributyl phosphate (TBP). In reality it contained very little TBP; therefore, to eliminate confusion, it will be referred to as uranium recovery (UR) waste in this report.

■ Strontium Semiworks

The strontium or hot semiworks processing facility (i.e., C Plant) was built in 1949 as a hot pilot plant for the REDOX process, but was later converted to a pilot plant for the PUREX process. In 1960, the plant was reactivated and used later as a process demonstration for the conversion of B Plant to a waste fractionation facility and was used to recover strontium 90, promethium 147, and cesium 144 from PUREX waste. The building and building site have been decontaminated and decommissioned.

The strontium semiworks waste sent to SSTs was known as hot semiworks (HS), strontium semiworks (SSW), and fission products waste (FP).

■ PUREX

The Plutonium Uranium Extraction (PUREX) plant (i.e., A Plant) was an advanced solvent extraction process that used tributyl phosphate in a paraffin hydrocarbon solvent to recover uranium and plutonium from nitric acid solutions of irradiated uranium. PUREX was built between April 1953 and April 1955, it operated until 1972 when it was closed for 11 years. Two thorium campaigns were conducted in the PUREX plant between 1966 and 1971. The irradiated waste was similar to the PUREX waste but it contained thorium and uranium 233 rather than uranium and plutonium which was extracted from typical PUREX waste. It began operating again in November 1983 and was shut down in 1988 after a safety violation. The PUREX Plant was shut down several times between 1988 and 1990 for various reasons. In October 1990, the PUREX Plant was put in standby mode and was eventually identified for closure in December 1992 by Secretary of Energy James Watkins.

The following PUREX waste streams were sent to SSTs: cladding waste (CW) or (CWP), organic solvent wash waste (OWW), neutralized PUREX plant acid waste (P), low-level waste from PUREX (PL), PUREX sludge supernatant liquid (PSS), organic wash waste using sodium carbonate (CARB), cesium feed (CF), and concentrated neutralized high-level waste (1WW).

1.5.2 Waste Management Operations

This section describes the different waste concentrating methods used in the 200 Areas. Evaporating, concentrating, and scavenging are all methods used to reduce liquid volumes or precipitate solids out of the supernatant solutions. The operations are presented in chronological order.

■ 242-T Evaporator

The 242-T Evaporator was built in the early 1950s to reclaim nonboiling waste storage capacity in existing tanks. The evaporator was shut down in the summer of 1955 and modified for tributyl phosphate scavenging, although scavenging was never performed in this evaporator. The 242-T Evaporator restarted in 1965 and operated until 1976. Tank 241-TX-118 was the feed tank for the evaporator.

The following wastes were sent to tanks from the 242 T Evaporator: Slurry product from the evaporator bottoms (EB), evaporator feed (EF), and terminal liquor (TL).

■ 242-B Evaporator

The 242-B Evaporator was built south of the B Tank Farm and started operating in December 1951. It received feed waste until November 1954 and was shut down in September 1955. The evaporator was never reactivated. Tanks 241-B-105 and -106 were used as the bottoms and feed tank respectively. The evaporator operated at atmospheric pressure.

■ Ferrocyanide Scavenging

Ferrocyanide scavenging was developed to reduce waste volumes. The ferrocyanide flow sheet was first tested in U Plant in October 1953. In-farm scavenging was completed in March 1956 and December 1957 for the 200-West and 200-East Areas respectively. The ferrocyanide scavenging program was designed to remove fission products such as ^{137}Cs (half life: 28.6 yr) and ^{90}Sr (half life: 30.2 yr) from the UR and 1C wastes as a precipitate. Because the ^{90}Sr was essentially insoluble in the neutralized UR waste, the strontium compounds would precipitate as phosphates, sulfates, or hydrated oxides when the acidic waste was neutralized. However, common cesium compounds are quite soluble even at alkaline pHs. Development of the nickel ferrocyanide scavenging process provided a relatively simple process to precipitate ^{137}Cs and enhance the precipitation of ^{90}Sr . The precipitating chemicals were added in stainless steel process vessels with agitation (i.e. U Plant, T Plant, or the CR vault) and the waste slurry was routed to specific SSTs for settling. After the ^{137}Cs and ^{90}Sr precipitates settled, the

clarified supernatant was sampled and disposed of in cribs. After the ^{137}Cs and ^{90}Sr precipitates settled, the clarified supernatant was sampled and disposed of in cribs.

■ In-Tank Solidification

The primary function of the in-tank solidification systems was to concentrate the nonboiling waste directly inside of specially designed tanks that would produce a saltcake slurry. Each in-tank solidification system included a heat exchanger for water evaporation and a series of bottoms tanks. The first in-tank solidification unit (ITS #1) operated with an airlift circulator through Tank 241-BY-102 and the second in-tank solidification unit (ITS #2) operated with a similar circulator through Tank 241-BY-112. Tank 241-BY-112 contained a 4,000 kW electric immersion heater. Tank 241-BY-101 contained an in-tank solidification prototype that was used only for demonstration purposes. In-tank solidification units 1 and 2 began operating in 1965 and 1968, respectively. In 1971 in-tank solidification unit 1 became the cooler for in-tank solidification unit 2. Both units were shut down in 1974.

■ REDOX Concentrator

The REDOX concentrator was used for volume reduction of dilute 200-West Area tank farm wastes by removing water. The concentrator received tank farm wastes from July 28, 1967 until June 30, 1972. Cell D in the REDOX process was the concentration and neutralization section of the plant.

■ 242-S Evaporator/Crystallizer

The 242-S Evaporator/Crystallizer began operating in November 1973 and shut down in 1981. It was designed as a reduced pressure (i.e., partial vacuum) evaporator/crystallizer. Aqueous salt wastes were converted in the evaporator to salt crystals for storage in underground tanks in the S and SX Tank Farms.

The following waste types were sent to SSTs from the 242-S Evaporator: non-complexed waste concentrated until the solution was nearly saturated with sodium aluminate known as double-shell slurry feed (DSSF), slurry product from the evaporator bottoms (EB), evaporator feed (EF), Hanford defense residual liquor (HDRL), partial neutralized feed waste (PNF), and terminal liquor (TL).

■ 242-A Evaporator/Crystallizer

Construction of the 242-A Evaporator/Crystallizer was completed in 1976. The evaporator began operation in March 1977 with a design life of 10 years. In 1987, design changes were developed to extend the facilities operating life by 10 years. The evaporator was shut down in April 1989 because of regulatory issues and restarted in May 1994 after extensive modifications.

The following evaporated wastes were sent to SSTs: evaporator bottoms from B Plant low-level waste feed (BLEB), non-complexed waste concentrated in evaporators known as double-shell slurry feed

(DSSF), evaporator feed (EF) or (EVAP), evaporator bottoms (EB), and terminal liquor (TL).

1.5.3 Miscellaneous Waste Sources and Equipment

There are various other sources of waste on the Hanford Site, as well as other material added to the tanks. Some wastes are from the 300 Area, 100 Area production reactors, various laboratories, and catch tanks. Unique contents added to SSTs included laboratory wastes, diatomaceous earth, Portland cement, shroud tubes, ceramic balls, experimental fuel elements, and relatively small amounts of enriched uranium, plutonium, cobalt, and natural uranium.

The following wastes contribute to SST waste: diatomaceous earth (DE), Hanford defense residual liquor (HDRL), Hanford laboratory operations (HLO), filtered Hanford water (H₂O), phosphate decontamination waste from N reactor (N), and non-complexed waste (NCPL).

■ Critical Mass Lab

The critical mass lab was used to develop data on the factors that are necessary to make a criticality or self-sustained nuclear reaction occur. Because plutonium is the key radioactive element on the Hanford Site, the research was based on plutonium criticality safety in various fuel cycles. This facility was located next to the strontium semiworks and ran from the early 1950s to the early 1980s. The plutonium used in the lab was reprocessed in PUREX.

■ 244-AR, -BXR, and -CR Process Vaults

There are three process vaults in the NE quadrant: the AR Vault, the BXR Vault, and the CR Vault. The vaults were composed of several process vessels or tanks used to prepare the waste for treatment or storage. Specific wastes from tanks can be pumped temporarily to the vaults and the wastes can be sent directly to desired tanks or processing facilities later.

The AR Vault was designed and constructed between 1964 and 1968 and is located next to the A and AX Tank Farms. The AR Vault has been in standby mode since 1978.

The 244-BXR Vault is located south of the 241-BX Tank Farm and was constructed between 1950 and 1951. The BXR Vault began operating in 1952 and became inactive in 1956. The waste in the vault was difficult to handle, so the vault was high-pressure steam jetted in 1976. The vault was interim isolated after 1976 and interim stabilized in March 1985. Tank BXR-004 was removed in 1963.

The CR Vault was constructed in 1952 and is located next to the C Tank Farm. Saltwell waste from the C Tank Farm is interim stored in the CR Vault. The 244-BXR and -CR Vaults were constructed to aid in the recovery of uranium from bismuth

phosphate metal waste. The CR Vault received waste from the Strontium Semiworks Plant en route to the 241-C Tank Farm.

■ **204-AR and 204-S Railroad Car Facilities**

The 204-AR rail car unloading facility was built in 1981 and replaced the 204-S rail car unloading facility. The facilities were built for unloading radioactive liquid waste tank cars.

Liquids or slurries from the 1314-N Building in the 100 Area and the 340-B Building in the 300 Area are unloaded at the 204-AR unloading facility.

1.5.4 Timeline

The following timeline represents the times and spans of different events that occurred during the lifetime of major Hanford plants in the 200-East and 200-West Areas. The plants were the main contributors of waste currently contained in SSTs. The following list of abbreviations and corresponding meanings are used on the timeline:

PUREX:	Plutonium uranium extraction process
UO ₃ :	Uranium trioxide
PFP:	Plutonium finishing plant
RG-RB:	Rubber glove - remote button line
RMA:	Remote mechanical "A" line
RSE:	Recuplex solvent extraction
RMC:	Remote mechanical "C" line
PRF:	Plutonium reclamation facility
PCB:	Polychlorinated biphenyls
WESF:	Waste encapsulation and storage facility
ITS:	In-tank solidification (units 1 and 2)
PWR:	Pressurized water reactor
REDOX:	Reduction oxidation process

PROCESSES PRODUCING WASTE CONTAINED IN 200 AREA TANK FARMS

1.6 Safety Issues

The safety issues that effect the tanks can be divided into two groups: watch list and non-watch list. The watch lists are listings of the tanks believed to pose potential safety hazards to the environment and the public. Non-watch list issues are of concern because they may impact the environment.

1.6.1 Watch List Safety Issues

Issues in these tanks were identified as "issues/situations that contain most necessary conditions that could lead to worker (onsite) or offsite radiation exposure through an uncontrolled release of fission products" under Public Law 101-510, Section 3137, of the National Defense Authorization Act of Fiscal Year 1991 (i.e., the Wyden Amendment). As of October 1993, 45 SSTs and 6 double-shell tanks are on a watch list. In the NE quadrant, 21 of the 66 SSTs are on a watch list. The four watch list designations described in this report are: ferrocyanide, hydrogen/flammable gas, organic salts, and high-heat load. The following sections provide a general description and criteria of the different watch lists. For a more complete explanation, refer to the Hanford Site Tank Farm Facilities Interim Safety Basis (WHC 1993).

■ Ferrocyanide

A tank containing or believed to contain greater than 1,000 gram moles of ferrocyanide (dry basis) is on the Ferrocyanide Watch List.

■ Hydrogen and Flammable Gas

Most tanks were placed on the Hydrogen/Flammable Gas Watch List because of the potential to contain flammable gases rather than the verified presence of hazardous concentrations. Hydrogen/Flammable Gas Watch List tanks have been identified as unreviewed safety questions due to the concern of a flammable gas burn resulting in a radiological release.

■ Organic Salts

Tanks containing or believed to contain more than the equivalent of 10% by weight of sodium acetate or 3 wt% total organic carbon (TOC) on a dry basis received a watch list designation as in the Tank Farm Surveillance and Waste Status Summary Report (Hanlon 1993).

■ High-Heat Loads

Tanks with a heat load greater than 40,000 Btu/hr are designated as high-heat load tanks. Tank 241-C-106 is the only high-heat load tank on the high-heat load watch list.

A tank that does not appear on a watch list but has a heat load less than 40,000 Btu/hr is considered a low-heat load tank by default.

The following table lists the tanks in the NE quadrant that appeared on a watch list as of October 1993. A current list is published monthly in the Tank Farm Surveillance and Waste Status Summary Report (Hanlon 1993).

NE Quadrant Watch List Tanks

Tank	Category	Tank	Category
A-101	Hydrogen	BY-108	Ferrocyanide
AX-101	Hydrogen	BY-110	Ferrocyanide
AX-103	Hydrogen	BY-111	Ferrocyanide
B-103	Organic Salts	BY-112	Ferrocyanide
BX-102	Ferrocyanide	C-103	Organic Salts
BX-106	Ferrocyanide	C-106	High-Heat Load
BY-103	Ferrocyanide	C-108	Ferrocyanide
BY-104	Ferrocyanide	C-109	Ferrocyanide
BY-105	Ferrocyanide	C-111	Ferrocyanide
BY-106	Ferrocyanide	C-112	Ferrocyanide
BY-107	Ferrocyanide		

1.6.2 Non-Watch List Safety Issues

Tank leaks are a safety hazard because of the potential chemical and radioactive liquid releases to the ground. Corrosion is the main cause of tank leaks and stabilization, integrity, and intrusion prevention are discussed in the corrosion section of this report. Criticality, tank bumps, and toxic vapor releases are other safety issues that do not require a watch list designation and/or continual monitoring under the Wyden Amendment.

■ Corrosion

Corrosion is believed to be caused by localized or general reduction in SST mild carbon liner thickness. Localized liner thickness reduction is caused by three types of corrosion: pitting corrosion, stress corrosion cracking, and crevice cracking. General liner thickness reduction may be caused by uniform corrosion.

The SSTs were removed from service on or before November 21, 1980 and no longer accept wastes. When the SSTs are deactivated, an effort is made to minimize potential leaks into the earth by reducing the liquid waste contained in the SSTs. Primary stabilization is the first deactivation process of removing the supernatant or free liquid above the solid wastes within the SSTs. Supernatant is removed by turbine or jet pumps in a saltwell system, low-volume submersible pumps, or in situ drying. In

saltwell systems, the liquid is pumped from the waste through a pipe screen in a manner similar to ground water pumping. Tanks with less than 50,000 gal of drainable interstitial liquid and less than 5,000 gal of supernatant liquid are known as interim stabilized tanks. Liquid waste is sent to the evaporator/crystallizer concentrating facilities and the concentrated waste is deposited into double-shell tanks (DSTs).

Eventually, SSTs will be interim stabilized and prepared for intrusion prevention. (formerly known as interim isolation). Stabilization efforts will be completed prior to final closure of the SSTs. Partial isolation of the tanks includes sealing the piping and risers that are not required for pumping or other stabilization methods. Intrusion prevention is the total physical and administrative effort involved in sealing inactive storage tank accesses against liquid additions while still allowing for long-term surveillance.

There are 67 assumed/confirmed leaking SSTs in the 200 East and West Areas with 32 in the NE quadrant. The remaining 34 tanks in the NE quadrant are sound. There are 51 interim stabilized tanks in the NE quadrant and 15 noninterim stabilized tanks. Intrusion prevention is in place for 46 SSTs in the NE quadrant, and 20 tanks are at the partial interim isolation stage.

■ Criticality

Criticality is an inadvertent self-sustained nuclear chain reaction. Studies have concluded that a nuclear criticality accident in the tank farms is probably not an imminent risk. However, definitive knowledge of the fissile material inventory and distribution within the tanks is lacking. Therefore, criticality remains a safety issue. The key criticality radionuclide on the Hanford Site is plutonium. A fissile material criticality prevention specification of 125 kg has been placed on the tanks. An unusual occurrence report involving nuclear criticality was filed in June 1991 for Tank 241-C-104. An inventory of 56 kg was calculated later which indicated a low probability for criticality. Criticality is considered an unreviewed safety question but is not affected by the Wyden Amendment according to the Hanford Site Tank Farm Facilities Interim Safety Basis (WHC 1993).

■ Tank Bumps

Tank bumps have been an issue at Hanford since 1953 with the last bump occurring in 1968. The A Tank Farm is known to have had tank bumps. Tank bumps occur when heat from the hotter solid waste in the lower portion of the tank is suddenly transferred to a near boiling supernatant. Mixing can be achieved by "roll over" or sudden restart of airlift circulators which results in rapid fluid vaporization and a sudden internal tank pressurization that causes a bump. The three documented bumps that have occurred were due to airlift circulator failure followed by rapid startup of the airlift circulators which causes rapid mixing. Two key factors have been identified to control bumping: liquid and solid temperatures must be maintained as far away from the local boiling point as possible

and airlift circulators and ventilation systems must be operated as designed. A tank bump is extremely unlikely if airlift circulators and vent flow rates are maintained at 500 to 1,000 ft³/min per tank and 50 ft³/min to the airlift circulators, according to the Hanford Site Tank Farm Facilities Interim Safety Basis (WHC 1993).

■ Toxic Vapor Releases

The safety concern of toxic vapor releases have been analyzed recently at Hanford. Odors have been released from the C Tank Farm in the NE quadrant and from Tank 241-SY-101. Tank 241-C-105 has experienced releases that have resulted in worker exposure. If toxic vapors are determined to exist in a tank, three safety recommendations should be followed: determine a release rate, determine offsite and onsite exposure concentrations, and determine if the release is a spray effect. The entire issue of toxic gas releases at the tank farms has just begun to be understood, Hanford Site Tank Farm Facilities Interim Safety Basis (WHC 1993).

2.0 BX Tank Farm

2.0.1 BX Tank Farm History

The 241-BX Tank Farm was constructed between 1946 and 1947, south of the BY Tank Farm and west of Baltimore Avenue in the 200-East Area. The BX Tank Farm contains twelve 100 series; 530,000 gal; 75-ft diameter single-shell tanks. The tanks have an operating depth of 17 ft. Two years after construction of the B, C, T, and U Tank Farms, the BX Tank Farm was designed, similar to the others, but with non-boiling waste tanks that have a fluid temperature of 220°F maximum. The cascade overflow lines connect a series of three tanks and the end of the cascade series is hooked to the first cascade tank in the BY Tank Farm. The tanks are in a three-by-four arrangement and there are four groups of cascading tanks. A cascade group consists of three tanks in step configuration. The cascade overflow height is approximately 188 in. from the tank bottom.

The tanks in the BX Tank Farm contain non-complexed waste. Two tanks are on the ferrocyanide watch list and ten tanks are on the low-heat load list in the BX Tank Farm. A color 1993 aerial photograph of the B Tank Farm shows the tank orientation, a receiver valve, a transfer box, and a north arrow. The arrows between tanks represent the cascade overflow lines and the flow direction.

The BX Tank Farm construction specification number and project number are unknown at this time. The tanks in the BX Tank Farm are similar in design to the first generation tanks.

2.0.1.1 BX Tank Farm Waste History

Tanks 241-BX-101 through -106 received B Plant metal waste and U Plant waste. Tanks 241-BX-107 through -112 received B Plant first-cycle waste and cell 23 concentrator waste. Tanks 241-BX-101 through -106 were sluiced for uranium recovery between 1953 and 1955. The BXR process vault processed sluiced waste during the sluicing campaign. Tank 241-BX-110 received in-tank solidification bottoms waste during the first in-tank solidification program.

2.0.1.2 BX Tank Farm Temperature History

Each tank in the BX Tank Farm contains a single thermocouple tree designed to hold 11 to 14 thermocouple probes. Tanks 241-BX-102, -106, -110, and -111 are on the Ferrocyanide Watch List and have weekly temperature monitoring requirements. The remaining BX tanks have semiannual temperature monitoring requirements. Thermocouple elevations are not available for Tanks 241-BX-101, -103, -104, -107, and -109. The tanks currently have moderate temperatures near 70°F.

2.0.1.3 BX Tank Farm Integrity

The twelve 530,000 gal tanks in the BX Tank Farm are out of service. As of July 1993, seven were categorized as sound (i.e., tanks 241-BX-103, -104, -105, -106, -107, -109, -112) and five were categorized as assumed leakers (i.e., tanks 241-BX-101, -102, -108, -110, -111). Tank integrity surveillance methods consist of liquid observation wells, surface level measurements, and leak detection wells (i.e., drywells). If a discrepancy is observed as a result of the surveillance activities; notification, reporting, documentation, and investigation of the surveillance anomaly (data outside the criteria limits, changing trend, or departure from steady state) is conducted in accordance with the appropriate procedure. Generally, the first plan of action is to determine if the discrepancy is caused by something other than a tank leak or intrusions.

Tank 241-BX-111 has a liquid observation well that is used to monitor the interstitial liquid level. The maximum deviations from the established baseline are a 0.3-ft increase or a 0.4-ft decrease. The interstitial liquid level is monitored weekly with a neutron probe and on request with a gamma probe.

Surface level monitoring for manual measurement devices in the BX Tank Farm is conducted daily or quarterly, depending on the tank. The maximum allowable deviations from the established baseline are a 1-in. or 2-in. increase, depending on the tank, and a .5-in., 1-in., 2-in., 3-in., or no criterion decrease, depending on the tank. The no criterion designation was established for waste tanks containing sludge with little or no solution. For these tanks, in surface level decrease is not a valid means of leak detection because the level may decrease from sludge slumpage (especially during saltwell pumping), tape flushes, and perforation of the exposed sludge at the point of probe contact. Tanks that have a saltcake surface and that are equipped with an automatic Food Instrument Corporation gauge may have a 10-in. decrease criteria, which was established to alert operating personnel if the gauge unwinds in search of a conductive liquid surface.

The BX Tank Farm has 76 leak detection wells that were drilled from 1947 to 1977. Eight wells are not tank-specific. Drywells 21-00-02 (no longer active), 21-00-09 (no longer active), 21-00-21, and 21-00-22 have or had readings greater than the 50 c/s background radiation. The drywells are monitored on a monthly, yearly, or on request basis with scintillation or Geiger-Mueller probes. Increased activity criteria for monitoring conducted with scintillation and shielded scintillation probes are as follows: if the normal readings are less than 200 c/s, the readings must double and exceed 200 c/s; if the normal readings are greater than 200 c/s, the readings must double. Increased activity criteria for monitoring conducted with Geiger-Mueller probes are as follows: if the normal readings are in between 16 and 1,000 c/s, the readings must triple; if the normal readings are greater than 1,000 c/s, the readings must double. Drywells associated with

assumed leaking tanks are monitored for contamination migration, and the criteria limits do not apply except where new radiation peaks occur. If increasing drywell activity has not exceeded the action criteria stated above, appropriate personnel will determine if increased monitoring is required.

The illustration of the BX Tank Farm layout includes information on the drywell peaks, tank integrity, and tank status. The drywell information is based on summarized data prior to 1987 and from data collected between January 1990 and the present.

Graphical representations of the active drywells are in Appendix F. The graphs contain data from January 1990 to the present, including the peak c/s, the depth at which the peak occurred, and the date of the reading.

2.0.1.4 BX Tank Farm Historical Sample Analysis Data

Historically, SST waste samples have been analyzed to characterize the supernatant, sludge, and saltcake in each tank. The data compiled for this study were obtained from samples taken between the late 1950s and September 1, 1989.

2.0.2 Current Status of BX Tank Farm

Two tanks in the BX Tank Farm are on the Ferrocyanide Watch List. Tanks 241-BX-102 and -106 were listed in January 1991 and have been declared unreviewed safety questions because their explosion potential exceeds previously reported safety analysis consequences. Ferrocyanide Watch List tanks must be monitored for temperature on a weekly basis. Tanks 241-BX-101, -103, -104, -105, -107, -108, -109, -110, -111, and -112 are low-heat load tanks (i.e., <40,000 Btu/hr). Low-heat load tanks are monitored for temperature on a semiannual basis. Tanks 241-BX-110 and -111 were removed from the Ferrocyanide Watch List and are monitored on a weekly basis. The total volume of waste in the BX Tank Farm is 1,509,000 gal: 31,000 gal of supernatant; 221,000 gal of saltcake; 198,000 gal of unknown solids; and 1,059,000 gal of sludge.

2.0.2.1 BX Tank Farm In-Tank Photographs

The BX Tank Farm is a battery of first-generation tanks built in 1946-47 after the B and C Tank Farms and before the BY Tank Farm. The BX Tank Farm consists of twelve 530,000 gal tanks. The tanks were designed to cascade into the BY Tank Farm when it was constructed. The typical BX tank is equipped with 11 risers through the tank dome, one through the center, and one on each side of the tank. The photos are usually taken from a side riser and the camera is aimed toward the other side. Most photos provide a current representation of the contents because no pumping activity has occurred since the photos were taken, except where noted.

2.1 Tank 241-BX-101

2.1.1 241-BX-101 Tank History

2.1.1.1 Waste History Tank 241-BX-101

The waste history narrative in the following paragraph is from "A History of the 200 Area Tank Farms" (Anderson 1990). Tank 241-BX-101 was filled with metal waste from January to June 1948. The tank cascaded between 1948 and 1951. From the first quarter of 1948 to the fourth quarter of 1953, the tank contained metal waste. During the second quarter of 1953, supernatant removal was completed. A sludge estimate was performed on the tank in the second and third quarters of 1953. From the second quarter of 1953 to the second quarter of 1954, metal waste was sluiced for uranium recovery. The tank was emptied on June 10, 1954. In the fourth quarter of 1956, waste was transferred to a ditch. The tank received waste from a line draining in the first quarter of 1957. From the third quarter of 1956 to the fourth quarter of 1961, the tank contained U Plant waste. Between the second quarter of 1962 and the fourth quarter of 1967, the tank contained U plant and coating waste. During the first and third quarters of 1968, the tank contained U Plant waste, coating waste, and evaporator bottoms waste. From the fourth quarter of 1968 to the second quarter of 1970, Tank 241-BX-101 contained B Plant low-level waste. Starting in the second quarter of 1970, the tank received B Plant ion exchange waste that was processed for cesium removal in preparation for in-tank solidification. Between the second quarter of 1970 and the second quarter of 1972, the tank received various wastes. The tank received B Plant low-level waste and ion exchange waste from the third quarter of 1972 until the first quarter of 1976. The tank was a suspect leaker in 1973. In 1974, a P-10 pump was installed in Tank 241-BX-101. In the fourth quarter of 1977, a saltwell was installed in the tank. The tank was deactivated in 1978. Presently, the tank waste is classified as non-complexed.

The waste history narrative of the primary additions that follow in this paragraph are from the "Waste Status and Transaction Record Summary" (Agnew 1994). Tank 241-BX-101 received metal waste from the first quarter of 1948 until the first quarter of 1951. From the first quarter of 1957 until the second quarter of 1971, the tank received wastewater. The tank received saltcake waste from the in-tank solidification units from the first through third quarters of 1968. From the fourth quarter of 1968 until the second quarter of 1969, the tank received B Plant low-level waste. The tank received cesium recovery waste from the second quarter of 1970 until the fourth quarter of 1972.

The tank was primary stabilized in 1978. The tank was interim stabilized in September 1978, intrusion prevention was completed in May 1981, and a level adjustment was made in April 1982. In-tank photographs were taken on the following dates: May 1973, two in 1974, March 1975, September 1976, March 1980, April 1981, February 1982, two in 1986, and November 1988. Current temperature readings

from July 1993 are unavailable because the thermocouples are out of service. Sketch ES-TKS-E27, which shows a graphical representation of the Tank 241-BX-101 level history, and the historical waste level data used to make it are in Appendix C.

2.1.1.2 Temperature History 241-BX-101

The single thermocouple tree in Tank 241-BX-101 has 14 probes to monitor the waste temperature. Thermocouple elevations are not available at this time. Thermocouples 1 through 12 have similar readings that span from 1974 to 1993. Two data points, from 1974 and 1982, are available for thermocouple 13. No data are available for thermocouple 14 and no data are available for any thermocouples between 1985 and 1992. The thermocouple tree is out of service and a work order has been issued to correct the problem.

The mean temperature of the first daily recorded readings was 26.5°F. A sum of the squares regression line fit for the first twelve thermocouples shows no overall temperature change and a large amount of variability. From December 1974 to July 1975, the temperature increased approximately 50°F. Not enough data points are available for an accurate regression and variability analysis on thermocouples 13 and 14. The median temperature is 70°F with a minimum of 47°F and a maximum of 86°F. Tank 241-BX-101 is scheduled to have temperature data taken semiannually in January and July.

Plots of the thermocouple readings for Tank 241-BX-101 are in Appendix D.

2.1.1.3 Integrity of Tank 241-BX-101

Tank 241-BX-101 is categorized as an assumed leaker and is interim stabilized with intrusion prevention completed. The Tank 241-BX-101 surface level is monitored daily with a manual tape. Liquid waste volume is determined by a photographic evaluation, while solid waste volume is determined by a manual tape surface level gauge. The maximum allowable deviations from the 11-in. baseline are a 1-in. increase and a 2-in. decrease. The figure that graphically represents the surface level measurements from January 1991 to the present is in Appendix E. The surface level data for the past 3 years ranges between 9.5 and 12 in.

Tank 241-BX-101 does not have a liquid observation well. Two drywells (21-01-01 and 21-01-02), with activity prior to 1990, are identified for Tank 241-BX-101. Drywell 21-01-01 had current readings > 200 c/s and drywell 21-01-02 had current readings < 200 c/s.

Graphical representations of the active drywells from January 1990 to the present are in Appendix F. Each graph includes the peak c/s (some wells have multiple peaks), the depth at which the peak occurred, and the date of the reading.

2.1.1.4 Historical Sample Analysis Data for Tank 241-BX-101

A sludge analysis for Tank 241-BX-101 was conducted in March 1976. The analysis included chemical and physical property data and the heat generation rate based on the ^{90}Sr and ^{137}Cs levels. The table presenting the results of this analysis is in Appendix H. The tank contains some spent organic ion exchange resin (Dualite) according to information recorded in 1977 and 1979.

2.1.2 Current Status of Tank 241-BX-101

Tank 241-BX-101 entered service in January 1948 and currently stores 43,000 gal of waste. The waste is comprised of 1,000 gal of supernatant; 13,000 gal of unknown waste; and 29,000 gal of sludge with no saltcake or pumpable liquid remaining.

The tank is identified as a low-heat load tank, is passively ventilated, and is categorized as an assumed leaker with interim stabilization and intrusion prevention completed. Tank 241-BX-101 is equipped to cascade to Tank 241-BX-102 and is first in the three-tank cascade series. The plan view and tank cross-section that depict the approximate waste level and riser configuration are in Appendix G. Tank 241-BX-101 has 10 risers and one 12-in. riser (no. 7) is available for use.

2.1.2.1 Waste Layer Volume Approximation for Tank 241-BX-101

A comparative analysis of all layer approximations for the entire Tank Farm and the data used to derive the tank layer approximations are located in Appendix K.

2.1.2.2 In-Tank Photograph 241-BX-101

The assembled 1988 photographs of the Tank 241-BX-101 interior indicate a dark brown sludge ring around the perimeter with a major portion of the surface covered with translucent reddish-brown liquid (see Appendix I). Records indicate that 7 m³ of ARC-359 (A trademark of Atlantic-Richfield Company) organic ion exchange resin was added to this tank in 1972 (Boomer 1990). The quality of these photographs is good and the equipment throughout the tank is clearly visible and has been identified and labelled. The tank contains approximately 1,000 gallons of supernatant and 42,000 gallons of sludge, which measures approximately 1 ft in depth. There have been no changes in the tank which would affect the waste since these photographs were taken; therefore, the picture should be representative of the current tank contents.

2.1.3 Synopsis Tank 241-BX-101

(To be completed)

2.2 Tank 241-BX-102

2.2.1 241-BX-102 Tank History

2.2.1.1 Waste History Tank 241-BX-102

The waste history narrative in the following paragraph is from "A History of the 200 Area Tank Farms" (Anderson 1990). Tank 241-BX-102 was filled with metal waste from June 1948 to September 1948. The tank was cascading between 1948 and 1951. The tank contained metal waste until the second quarter of 1954. From the second quarter of 1953 until the third quarter of 1954, the metal waste was sluiced for uranium recovery, leaving a sludge heel. From the third quarter of 1956 to the fourth quarter of 1963, the tank contained U Plant waste that was sent to ditches in the fourth quarter of 1956. From the second quarter of 1962 to the fourth quarter of 1963, the tank received coating waste. From the second quarter of 1964 until the first quarter of 1970, the tank contained coating waste. In the first quarter of 1968, waste was transferred to cell 23 at B Plant for concentration. During the third quarter of 1968, the tank contained coating waste and evaporator bottoms waste. From the fourth quarter of 1968 to the fourth quarter of 1969, the tank contained coating waste and B Plant low-level waste. In the first quarter of 1970, the tank contained coating waste and organic wash waste. The tank contained B Plant low-level waste in the second quarter of 1970. The tank became an assumed leaker with a leak volume of 70,000 gal and was taken out of service in 1971. During January 1972, approximately 95 tons of diatomaceous earth were added to absorb any remaining liquid in the tank. Presently, the tank waste is classified as non-complexed.

Tank 241-BX-102 did not receive any primary waste additions according to the "Waste Status and Transaction Record Summary" (Agnew 1994) report.

Intrusion prevention was completed in October 1980. The tank was declared interim stabilized in November 1978. In April 1982, a level adjustment was made. In-tank photographs were taken on the following dates: two in 1970, several in 1971, January 1972, November 1978, and September 1985, and it had a pH reading of 14.0 in September 1974. The current maximum temperature reading from October 1993 is 68° F. Sketch ES-TKS-E28, showing a graphical representation of Tank 241-BX-102 level history, and the historical waste level data used to make it are in Appendix C.

2.2.1.2 Temperature History 241-BX-102

Tank 241-BX-102 contains one thermocouple tree with 13 probes to monitor the waste temperature. Elevations are available for all the thermocouple probes except 12 and 13. Thermocouples 1 through 11 have very similar temperature readings that span from 1975 to the present. Data for thermocouple 12 are available from 1976 to the present. Thermocouple 13 has only one recorded point in June 1992. No data are available from 1985 to 1992, although two

thermocouple trees were detected in the tank during September 1985. Review of the Tank 241-BX-102 level history indicates that unto March 1982, the thermocouples were in the vapor space. After that date, only thermocouple 1 was in or near the solid level.

The mean temperature of the first daily recorded readings was 59°F. A sum of the squares regression line fit for the first 12 thermocouples shows no overall temperature change and a moderate amount of variability. An annual tank temperature undulation is more evident after October 1989. Not enough points are available for an accurate regression and variability analysis on thermocouple 13. The median temperature is 65°F with a minimum of 51°F and a maximum of 83°F. Tank 241-BX-101 was added to the Ferrocyanide Watch List in January 1991 and has weekly temperature reading requirements.

Plots of the thermocouple readings for Tank 241-BX-102 are in Appendix D.

2.2.1.3 Integrity of Tank 241-BX-102

Tank 241-BX-102 is categorized as an assumed leaker and is interim stabilized with intrusion prevention completed. The Tank 241-BX-102 surface level is monitored quarterly with a manual tape. Liquid waste volume is determined by a photographic evaluation, and solid waste volume is determined by a manual tape surface level gauge. The maximum allowable increase from the 30.25-in. baseline is 2 in. There is no criterion for a decrease. The figure that graphically represents the surface level measurements from January 1991 to the present is in Appendix E. The surface level for the past 3 years has remained steady with the readings ranging between 28.5 and 28-in.

Tank 241-BX-102 does not have a liquid observation well. Six drywells are identified for Tank 241-BX-102. Drywells 21-02-03 (active prior to 1990, current readings <200 c/s), 21-02-04 (active prior to 1990, current readings > 200 c/s), and 21-02-06 (active prior to 1990, current readings > 200 c/s) have readings greater than the 50 c/s background radiation.

Graphical representations of the data for each active drywell from January 1990 to the present are in Appendix F. Each graph includes the peak c/s (some wells have multiple peaks), the depth at which the peak occurred, and the date of the reading.

Eight 21-27-xx series drywells are associated with a Tank 241-BX-102 leak investigation. Drywells 21-27-01, -02, -07, -08, -09, -10, and -11 have or had readings greater than the 50 c/s background radiation which is based on data through 1986.

2.2.1.4 Historical Sample Analysis Data for Tank 241-BX-102

In 1971, a sample from Tank 241-BX-102 was analyzed as part of an investigation of a tank leak and in 1974, a liquid sample from the tank was evaluated. The 1974 sample was clear yellow and contained no solids. The results of these analyses are in Appendix H.

2.2.2 Current Status of Tank 241-BX-102

Tank 241-BX-102 entered service in June 1948 and currently stores 96,000 gal of non-complexed waste. The waste is comprised of 39,000 gal of unknown waste; 17,000 gal of diatomaceous earth; and 40,000 gal of sludge with no pumpable liquid remaining. The tank is identified on the Ferrocyanide Watch List, is passively ventilated, and is categorized as an assumed leaker with interim stabilization and intrusion prevention completed. Tank 241-BX-102 is equipped to cascade to Tank 241-BX-103 and is second in the three-tank cascade series. The plan view and tank cross-section that depict the approximate waste level and riser configuration are in Appendix G. Tank 241-BX-102 has 10 risers and one 12-in. riser, (no. 7) is available for use.

2.2.2.1 Waste Layer Volume Approximation for Tank 241-BX-102

A comparative analysis of all layer approximations for the entire Tank Farm and the data used to derive the tank layer approximations are located in Appendix K.

2.2.2.2 In-Tank Photograph 241-BX-102

The 1985 assembled photographs of the Tank 241-BX-102 interior indicates a dry-white waste surface, which corresponds to the diatomaceous earth that has been added to the tank (Welty 1988). Picture quality is poor and the appearance is hazy (see Appendix I). The craters on the surface are the result of equipment being removed from the tank. Equipment is difficult to see but some has been identified and labelled. Approximately 96,000 gal of waste is in the tank which corresponds to approximately 2 ft of waste. There have been no changes in the tank which would affect the waste since these photographs were taken; therefore, the picture should be representative of the current tank contents.

2.2.3 Synopsis Tank 241-BX-102

(To be completed)

2.3 Tank 241-BX-103

2.3.1 241-BX-103 Tank History

2.3.1.1 Waste History Tank 241-BX-103

The waste history narrative in the following paragraph is from "A History of the 200 Area Tank Farms" (Anderson 1990). Tank 241-BX-103 was filled with metal waste from September 1948 to January 1949. The tank transferred and received waste via the cascade from the third quarter of 1948 until the first quarter of 1951. From the third quarter of 1948 to the second quarter of 1954, the tank contained metal waste. In the fourth quarter of 1954, the tank was scavenged to recover uranium from the metal waste. In the fourth quarter of 1956, the waste was sent to ditches. Between the third quarter of 1956 and the fourth quarter of 1963, the tank contained U Plant waste. From the fourth quarter of 1962 to the fourth quarter of 1963, the tank also contained coating waste. From the second quarter of 1964 until the second quarter of 1968, the tank contained coating waste. From the first quarter of 1969 to the first quarter of 1970, Tank 241-BX-103 contained coating waste and organic wash waste. Between the second quarter of 1970 and the first quarter of 1975, the tank contained various wastes. The transfers to and from the tank during this period are not from other tanks or specific processes. The tank contained ion exchange waste from the second quarter of 1975 to the second quarter of 1976. From the third quarter of 1976 until the first quarter of 1977, the tank contained evaporator feed waste. The tank was inactive in 1977. Presently, the tank contains non-complexed waste.

The waste history narrative of the primary additions that follow in this paragraph are from the "Waste Status and Transaction Record Summary" (Agnew 1994). Tank 241-BX-103 received wastewater from the first quarter of 1970 until the fourth quarter of 1973.

A saltwell was installed in 1977. Interim stabilization and a level adjustment were completed in November 1983. In October 1985, intrusion prevention was completed. In-tank photographs were taken on the following dates: two in 1971, two in 1979, two in 1983, and October 1986. Sketch ES-TKS-E29 shows three pH readings, 12.9 in November 1974, 11.8 in June 1975, and 10.6 in October 1975. Current temperature readings are unavailable due to out of service thermocouples. Sketch ES-TKS-E29, which shows a graphical representation of the Tank 241-BX-103 level history, and the historical waste level data used to make it are in Appendix C.

2.3.1.2 Temperature History 241-BX-103

The single thermocouple tree in Tank 241-BX-103 has 12 thermocouple probes to monitor the waste temperature. Thermocouple elevations are not available at this time. The temperature probes have similar readings that span from 1974 to 1983. The notable exception is thermocouple 12 which does not contain as many data

points as the others. A thermocouple tree was in the tank in October 1986. Current data indicate that the last recorded temperature reading was in October 1992 and the thermocouple tree is now out of service.

The mean temperature of the first recorded data was 24.5°F. A sum of the squares regression line fit for all but the first three data points for all thermocouples shows a temperature increase with a large amount of variability. An initial jump in temperature of approximately 50°F, consisting of the first three data points, occurred from April 1975 to July 1975 which is uncharacteristic of the other data. The median temperature is 64°F with a minimum of 59°F and maximum of 91°F. Tank 241-BX-103 is scheduled to have temperature data taken semiannually in January and July.

Plots of thermocouple readings for Tank 241-BX-103 are in Appendix D.

2.3.1.3 Integrity of Tank 241-BX-103

Tank 241-BX-103 is categorized as sound and is interim stabilized with intrusion prevention completed. The Tank 241-BX-103 surface level is monitored with a Food Instrument Corporation gauge through riser 8. Liquid waste volume is determined by a photographic evaluation, and solid waste volume is determined by a Food Instrument Corporation gauge. If the Food Instrument Corporation gauge fails, manual field measurements are conducted on a daily basis. The maximum allowable deviations from the established 20.4-in. baseline are a 1-in. increase or a 0.5-in. decrease. The figure that graphically represents the surface level measurements from January 1991 to the present is in Appendix E. The surface level plot for the past 3 years indicates an increasing trend with readings ranging between 19.7 and 19.8 in. during the first quarter of 1991 and steadily increasing to between 20.25 and 20.5-in. during the fourth quarter of 1993.

An occurrence report was issued in March 1993 when the surface level exceeded the increase limit. An investigation of the intrusion is underway. A new in-tank photograph package has been initiated to determine the route of entry.

Tank 241-BX-103 does not have a liquid observation well. Five drywells are identified for Tank 241-BX-103. Drywells 21-03-03 and 21-03-05 (both no longer active) and 21-03-12 (active prior to 1990, current readings > 200 c/s) have or had readings greater than the 50 c/s background radiation. A graphical representation of the active drywell from January 1990 to the present is in Appendix F. The graph includes the peak c/s (some wells have multiple peaks), the depth at which the peak occurred, and the date of the reading.

2.3.1.4 Historical Sample Analysis Data for Tank 241-BX-103

Data from five samples taken from Tank 241-BX-103 are in Appendix H. The samples were taken between November 1974 and October 1975. They were all liquid and remained in the liquid state even when cooled to 5°C. Two samples were described as yellow colored, two were brown, and one was amber or light brown.

2.3.2 Current Status of Tank 241-BX-103

Tank 241-BX-103 entered service in September 1948 and currently stores 66,000 gal of non-complexed waste. The waste is comprised of 4,000 gal of supernatant; 8,000 gal of unknown waste; and 54,000 gal of sludge with no pumpable liquid remaining. The tank is identified as a low-heat load tank, is passively ventilated, and is categorized as sound with interim stabilization and intrusion prevention completed. Tank 241-BX-103 is third in the three-tank cascade series. The tank cascades to Tank 241-BY-101. The plan view and tank cross-section that depict the approximate waste level and riser configuration are in Appendix G. Tank 241-BX-103 has 10 risers and one 12-in. riser, (no. 7) is available for use.

2.3.2.1 Waste Layer Volume Approximation for Tank 241-BX-103

A comparative analysis of all layer approximations for the entire Tank Farm and the data used to derive the tank layer approximations are located in Appendix K.

2.3.2.2 In-Tank Photograph 241-BX-103

The 1986 assembled photographs of the Tank 241-BX-103 interior is poor quality and waste surface features are unidentifiable (see Appendix I). It appears that the color may be black. Records indicate that 57 tons of Portland cement was added to this tank (Boomer 1990). Some equipment in the tank is visible and it has been identified and labelled. The tank contains approximately 66,000 gal of waste which corresponds to approximately 1.5 ft in depth. There have been no changes in the tank which would affect the waste since these photographs were taken; therefore, the picture should be representative of the current tank contents.

2.3.3 Synopsis Tank 241-BX-103

(To be completed)

2.4 Tank 241-BX-104

2.4.1 241-BX-104 Tank History

2.4.1.1 Waste History Tank 241-BX-104

The waste history narrative in the following paragraph is from "A History of the 200 Area Tank Farms" (Anderson 1990). The tank was filled with metal waste from January 1949 to April 1949. The tank was cascading between 1949 and 1951. From the first quarter of 1949 to the first quarter of 1955, the tank contained metal waste. In the second quarter of 1954, the supernatant was transferred to the 244-BXR process vault. During 1954, the tank was sluiced to recover uranium. In the first quarter of 1957, waste was transferred to a ditch. From the second quarter of 1956 to the second quarter of 1962, the tank contained U Plant waste. Between the fourth quarter of 1962 and the fourth quarter of 1967, the tank contained coating waste. In the fourth quarter of 1967, the tank contained coating waste, ion exchange waste, and evaporator bottoms waste. In the first quarter of 1968, the tank contained evaporator bottoms and ion exchange waste. From the second quarter of 1968 to the second quarter of 1970, the tank contained ion exchange waste. In the fourth quarter of 1970, the tank contained evaporator bottoms waste. Between the first quarter of 1971 and the third quarter of 1972, the tank contained water and REDOX high-level waste. From the fourth quarter of 1972 to the fourth quarter of 1974, the tank contained B Plant low-level waste and ion exchange waste. The tank contained ion exchange waste from the first quarter of 1975 to the second quarter of 1976. Between the third quarter of 1976 and the fourth quarter of 1977, the tank contained evaporator feed waste. From the first through the fourth quarters of 1977, the tank was a customer waste receiver. In the first quarter of 1978, the tank was an active waste receiver. In April 1978, a level adjustment and a cross-site transfer occurred. The tank contained non-complexed waste between the second and third quarters of 1978. Between the fourth quarter of 1978 and the fourth quarter of 1980, the tank waste was classified as double-shell slurry feed. From the first through fourth quarters of 1979, Tank 241-BX-104 contained complexed waste. The tank was deactivated in 1980. In the second quarter of 1980, Tank 241-BX-104 contained complexed waste. In the first and third quarters of 1980 Tank 241-BX-104 contained double-shell slurry feed waste. In the first quarter of 1980, a liquid level adjustment was performed in Tank 241-BX-104. Presently, the tank contains non-complexed waste.

The waste history narrative of the primary additions that follow in this paragraph are from the "Waste Status and Transaction Record Summary" (Agnew 1994). Tank 241-BX-104 received metal waste from the first quarter of 1949 until the fourth quarter of 1951. During the second quarter of 1964 the tank received PUREX cladding waste. The tank received cesium recovery waste from the fourth quarter of 1967 until the second quarter of 1976. During the first quarter of 1968 the tank received saltcake waste from the in-tank

solidification units. The tank received wastewater from the fourth quarter of 1970 until the first quarter of 1976.

Level adjustments were performed on Tank 241-BX-104 in November 1980 and in April 1982. Supernatant pumping was completed, interim stabilization was achieved, and a level adjustment was performed in September 1989. In-tank photographs were taken on the following dates: December 1980, February 1981, October 1986, and September 1989. Currently temperature readings are unavailable because the thermocouples are out of service. Sketch ES-TKS-E30 shows six pH readings; 11.0 in February 1974, 12.8 in May 1975, 12.2 in October 1975, 11.8 in February 1975, 13.7 in August 1980, and >12.0 in February 1986. Sketch ES-TKS-E30, which shows a graphical representation of the Tank 241-BX-104 level history, and the historical waste level data are in Appendix C.

2.4.1.2 Temperature History 241-BX-104

The single thermocouple tree in Tank 241-BX-104 has 14 probes to monitor the waste temperature. Thermocouple elevations are not available at this time. The thermocouples have similar temperature readings that span from 1974 to 1980. No data are available after 1980, although there was a thermocouple tree in the tank in September 1989.

The mean temperature of the first recorded data was 28°F. A sum of the squares regression line fit shows a slight increase in temperature with a very large amount of variability. The data have many pronounced high and low peaks. The median temperature is 77°F with a minimum of 41°F and a maximum of 124°F. Tank 241-BX-104 is scheduled to have semiannual temperature data taken in January and July.

Plots of the thermocouple readings for Tank 241-BX-104 are in Appendix D.

2.4.1.3 Integrity of Tank 241-BX-104

Tank 241-BX-104 is categorized as sound and is interim stabilized with intrusion prevention completed. The Tank 241-BX-104 surface level is monitored with a Food Instrument Corporation gauge through riser 8. If the Food Instrument Corporation gauge fails, manual field measurements will be conducted daily. The maximum allowable deviations from the established 31.4-in. baseline are a 2 in. increase and a 3-in. decrease. The figure that graphically represents surface level measurements from January 1991 to the present is in Appendix E. The surface level has remained steady because no data were available for 1992, and the readings range between 31.6 and 32 in. Two erratic data points that appear on the plot are attributed to a mechanical glitch in the automatic operation of the Food Instrument Corporation gauge.

Tank 241-BX-104 does not have a liquid observation well. Six drywells are identified for Tank 241-BX-104. Drywells 21-04-08, and 21-04-11 had readings greater than the 50 c/s background radiation.

2.4.1.4 Historical Sample Analysis Data for Tank 241-BX-104

Appendix H contains data from six analyses of samples from Tank 241-BX-104 that were performed between February 1974 and February 1976. Data from a 1988 sample will also be included in Appendix H. The first six samples contained only liquid even when cooled to 5°C. The 1988 data were obtained from a composite sample made up from five individual samples. The samples were composed of both solids and liquid but it appears that only the solids were analyzed. The total organic content of the tank was reported to be 5.7 g/l.

2.4.2 Current Status of Tank 241-BX-104

Tank 241-BX-104 entered service in 1949 and currently stores 99,000 gal of waste. The waste is comprised of 3,000 gal of supernatant; 55,000 gal of unknown waste; and 41,000 gal of sludge; and no saltcake with 27,000 gal of pumpable liquid remaining. This tank is identified as a low-heat load tank, is passively ventilated, and is categorized as sound with interim stabilization and intrusion prevention completed. Tank 241-BX-104 is equipped to cascade to Tank 241-BX-105 and is first in the three-tank cascade series. The plan view and tank cross-section that depict the approximate waste level and riser configuration are in Appendix G. Tank 241-BX-104 has 10 risers and one 12-in. riser (no. 7) is available for use.

2.4.2.1 Waste Layer Volume Approximation for Tank 241-BX-104

A comparative analysis of all layer approximations for the entire Tank Farm and the data used to derive the tank layer approximations are located in Appendix K.

2.4.2.2 In-Tank Photograph 241-BX-104

The 1989 montage of Tank 241-BX-104 interior is incomplete and hazy with color variations. A few of the photos show a pockmarked glossy black or brown sludge surface with small pools of liquid randomly distributed (see Appendix I). The true color is probably brown. A submersible pump and a temperature probe may be seen in the upper left corner of the picture and an Food Instrument Corporation level probe and a turbine pump are also visible in the picture. The tank contains 99,000 gallons of waste with a total depth of about 3 ft. The photographs were taken at about the same time the tank was jet pumped and interim stabilized; therefore, the picture may not represent the current tank contents.

2.4.3 Synopsis Tank 241-BX-104 (To be completed)

2.5 Tank 241-BX-105

2.5.1 241-BX-105 Tank History

2.5.1.1 Waste History Tank 241-BX-105

The waste history narrative in the following paragraph is from "A History of the 200 Area Tank Farms" (Anderson 1990). The tank was filled with metal waste from April 1949 to September 1949. The tank transferred and received waste via the cascade lines from the second quarter of 1949 until the fourth quarter of 1951. The tank contained metal waste until the second quarter of 1956. During the third quarter of 1954, the tank was sluiced for uranium recovery. In 1955 and 1956, the tank was a leach tank to recover uranium. Between the second quarter of 1956 and the fourth quarter of 1962, the tank received U Plant waste. The waste was pumped to a ditch in the first quarter of 1957. From the second quarter of 1963 to the fourth quarter of 1964, the tank contained coating waste. Between the second quarter of 1965 and the second quarter of 1969, the tank contained one or more of the following wastes: U Plant waste, coating waste, and ion exchange waste. From the third quarter of 1969 to the first quarter of 1974, the tank received ion exchange waste. Between the second quarter of 1974 and the second quarter of 1976, the tank contained evaporator bottoms waste and ion exchange waste. The tank contained evaporator feed from the fourth quarter of 1976 until the fourth quarter of 1977. The tank was an evaporator feed storage tank during this time. The tank was saltwell pumped in 1977. A cross-site transfer was made from the tank in the second quarter of 1978. A level adjustment was made in December 1978 and a cross-site transfer was sent to the tank. A supernatant pump was used in the third quarter of 1979 and a level adjustment was made in June 1980. The tank was inactive in 1980. The tank presently contains non-complexed waste.

The waste history narrative of the primary additions that follow in this paragraph are from the "Waste Status and Transaction Record Summary" (Agnew 1994). Tank 241-BX-105 received wastewater from the second quarter of 1972 until the first quarter of 1976.

Interim stabilization was completed after supernatant pumping in March 1981. Intrusion prevention was completed in September 1986 and the remaining supernatant was pumped to a lower level. Due to past inconsistencies in calculations, a level adjustment was made in 1990. In-tank photographs were taken on the following dates: January 1976, March 1979, December 1980, March 1982, and several in 1986. The current maximum temperature reading from July 1993 is 63° F. Sketch ES-TKS-E31 shows three pH readings: 12.1 in May 1956, 10.8 in February 1974, and >12.0 in March 1986. Sketch ES-TKS-E31, which shows a graphical representation of the Tank 241-BX-105 level history, and the historical waste level data used to make it are in Appendix C.

2.5.1.2 Temperature History 241-BX-105

The single thermocouple tree in Tank 241-BX-105 contains 14 probes to monitor the waste temperature. Thermocouple probe elevations are not available at this time. Thermocouples 1 through 12 have similar temperature readings from 1974 to the present. Data for thermocouples 13 and 14 are available from 1980 to 1987.

The mean temperature of the first recorded data for thermocouples 1 through 12 was 46.5°F. A sum of the squares regression line fit for the thermocouples shows no overall temperature change and a large amount of variability. The temperature dropped to a low of 19°F in December 1974 before rising 50°F by July 1975. The median temperature is 70°F with a minimum of 37°F and a maximum of 120.2°F. Tank 241-BX-105 is scheduled to have semiannual temperature data taken in January and July.

Plots of the thermocouple readings for Tank 241-BX-105 are in Appendix D.

2.5.1.3 Integrity of Tank 241-BX-105

Tank 241-BX-105 is categorized as sound and is interim stabilized with intrusion prevention completed. The Tank 241-BX-105 surface level is monitored with a Food Instrument Corporation gauge through riser 1. Liquid waste volume is determined by a Food Instrument Corporation gauge, while solid waste volume is determined by a sludge level measurement device. The gauge is set in the intrusion mode for a 1-in. increase. If the Food Instrument Corporation gauge fails, manual field measurements are conducted quarterly and the maximum allowable increase from the 25.8-in. baseline value is 2-in. There is no criterion for a decrease. Data for the surface level plot are not available due to the Food Instrument Corporation gauge setting.

Tank 241-BX-105 does not have a liquid observation well. Six drywells are identified for Tank 241-BX-105. Drywells 21-05-05 and 21-05-06 had readings greater than the 50 c/s background radiation.

2.5.1.4 Historical Sample Analysis Data for Tank 241-BX-105

Five analyses for Tank 241-BX-105 were conducted between February 1974 and January 1988. Tables presenting the results of these analyses are in Appendix H. The total organic content (TOC) was estimated at 4.9 g/l in 1990. All samples were liquid except for the composite evaluated in 1988. The composite was olive green with a gummy consistency like peanut butter. All liquid samples were yellow.

2.5.2 Current Status of Tank 241-BX-105

Tank 241-BX-105 entered service in 1949 and currently stores 51,000 gal of waste. The waste is comprised of 5,000 gal of supernatant; and 46,000 gal of unknown waste with 4,000 gal of

pumpable liquid remaining. The tank is categorized as sound, with interim stabilization and intrusion prevention completed. The tank is a low-heat load tank and is passively ventilated. Tank 241-BX-105 is equipped to cascade to Tank 241-BX-106 and is second in the three-tank cascade series. The plan view and tank cross-section that depict the approximate waste level and riser configuration are in Appendix G. Tank 241-BX-105 has 10 risers and one 12-in. riser (no. 2 is available for use).

2.5.2.1 Waste Layer Volume Approximation for Tank 241-BX-105

A comparative analysis of all layer approximations for the entire Tank Farm and the data used to derive the tank layer approximations are located in Appendix K.

2.5.2.2 In-Tank Photograph 241-BX-105

The 1986 montage of the Tank 241-BX-105 interior in Appendix I is hazy (most photographs) with a lot of color variation (all of photographs). Waste surface features cannot be determined from this picture. Equipment which is visible has been identified and labelled. The visible apparatus are; a flex and float pump, a submersible pump, a Food Instrument Corporation gauge and some debris. This tank contains 51,000 gal of waste which corresponds with a depth of about 1 ft. The photographs were taken at about the same time the tank was jet pumped; therefore, the picture may not represent the current tank contents.

2.5.3 Synopsis Tank 241-BX-105

(To be completed)

2.6 Tank 241-BX-106

2.6.1 241-BX-106 Tank History

2.6.1.1 Waste History Tank 241-BX-106

The waste history narrative in the following paragraph is from "A History of the 200 Area Tank Farms" (Anderson 1990). Tank 241-BX-106 was filled with metal waste from September 1949 to January 1950. The tank received and transferred wastes via the cascade lines from March 1949 until April 1951. The tank received metal waste until the first quarter of 1955. The supernatant was sent to Tank 241-BY-109 in 1954. The tank was sluiced for uranium recovery in the second quarter of 1955. From the second quarter of 1956 until the second quarter of 1967, the tank received U Plant waste and coating waste. During 1968, the tank received coating waste, evaporator bottoms waste, and ion exchange waste. The tank contained ion exchange waste from the first quarter of 1969 until the third quarter of 1970. Between the second quarter of 1972 and the first quarter of 1975, the tank received various wastes. From the second quarter of 1975 until the second quarter of 1976, the tank contained evaporator bottoms, ion exchange, and B Plant low-level wastes. The tank contained evaporator feed between the third quarter of 1976 and the fourth quarter 1977. The tank was inactive in 1978 and an open hole saltwell was installed. Presently, the tank waste is classified as non-complexed.

The waste history narrative of the primary additions that follow in this paragraph are from the "Waste Status and Transaction Record Summary" (Agnew 1994). Tank 241-BX-106 received wastewater from the first quarter of 1973 until the first quarter of 1975.

A level adjustment was made in April 1982. The tank is sound and is awaiting stabilization and intrusion prevention. In-tank photographs were taken on the following dates: September 1973, November 1978, January 1981, March 1982, December 1984, and May 1988. Sketch ES-TKS-E32, which shows a graphical representation of the Tank 241-BX-106 level history, and the historical waste level data used to make it are in Appendix C. The sketch shows three pH readings: 12.1 in May 1965, 11.9 in June 1974, and 13.9 in April 1975. The current maximum temperature reading from October 1993 is 70° F.

2.6.1.2 Temperature History 241-BX-106

The single thermocouple tree in Tank 241-BX-106 has 14 probes to monitor the waste temperature. Elevations are available for all the thermocouple probes. Thermocouples 1 through 12 have similar temperature readings that span from 1974 to the present. There are only two temperature readings for probe 13 (January 1975 and September 1991) and only one for probe 14 (January 1975). The readings fall in the same temperature range as the other thermocouples. No data is available from 1982 to 1989, although there was a thermocouple tree was detected in the tank in May 1988.

Review of the Tank 241-BX-106 level history indicates that no thermocouples are in the solid level. From July 1974 to July 1975, there was a liquid level spike where thermocouples 1 through 8 were reading in or near the liquid level and thermocouples 9 through 14 appear to have been reading in the vapor space. Until the end of 1975, only thermocouples 1 through 3 were in or near the liquid level and the rest appear to have been in the vapor space. Thermocouples 1 through 5 were in or near the liquid level, as seen from the liquid level spike between January 1976 and December 1976, and the rest appear to have been in the vapor space. Between January 1977 and October 1977, thermocouples 1 through 3 measured in or near the liquid level from a liquid level spike and the rest appear to have been in the vapor space. Thereafter, all the thermocouples measured in the vapor space.

The mean temperature of the first recorded data for thermocouples 1 through 11 was 43°F. A sum of the squares regression line fit for the first 12 thermocouples shows a slight temperature decrease with a moderate to large amount of variability. Not enough data points exist for an accurate regression and variability analysis on thermocouples 13 and 14. The tank experiences an annual temperature undulation that is more evident after October 1989. The median temperature is 66°F with a minimum of 46.9°F and a maximum of 114.8°F. Tank 241-BX-106 was added to the Ferrocyanide Watch List in January 1991 and has weekly temperature reading requirements.

Plots of the thermocouple readings for Tank 241-BX-106 are in Appendix D.

2.6.1.3 Integrity of Tank 241-BX-106

Tank 241-BX-106 is categorized as sound and is partially isolated. The Tank 241-BX-106 surface level is monitored manually and daily with a Food Instrument Corporation gauge. Liquid waste volume is determined by a photographic evaluation and a manual tape surface level gauge. Solid waste volume is determined by a photographic evaluation and a sludge level measurement device. The maximum allowable deviations from the established 12-in. baseline are a 2-in. increase and a 1-in. decrease. The figure that graphically represents the surface level measurements from January 1991 to the present is in Appendix E. The surface level for the past 3 years has remained steady with the readings ranging between 12.2 and 13-in. Six erratic data points that were superseded with rerun data points are shown on the plot. Tank 241-BX-106 does not have a liquid observation well.

Four drywells are identified for Tank 241-BX-106. Drywell 21-06-05 was active prior to 1990 and has readings greater than 200 c/s. Graphical representations of the active drywell are in Appendix F. The graphs include the peak c/s, the depth at which the peak occurred, and the date of the reading.

2.6.1.4 Historical Sample Analysis Data for Tank 241-BX-106

Data from four analyses of Tank 241-BX-106 conducted between April 1974 and April 1975 are included in this report. The samples didn't include any solids even though cooling curves were run on them down to 5°C. The first two samples were yellow, the third one was green, and the 1975 sample was light brown. Tables presenting the results of the four analyses are in Appendix H.

2.6.2 Current Status of Tank 241-BX-106

Tank 241-BX-106 entered service in 1949 and currently stores 46,000 gal of waste. The waste is comprised of 15,000 gal of supernatant; 5,000 gal of unknown waste; 26,000 gal of sludge; and no saltcake with 15,000 gal of pumpable liquid remaining. The tank is identified on the Ferrocyanide Watch List as of January 1991, is passively ventilated, and is categorized as sound with partial interim isolation completed. Tank 241-BX-106 is third in the three-tank cascade series. Tank 241-BX-106 cascades to Tank 241-BY-103. The plan view and tank cross-section that depict the approximate waste level and riser configuration are in Appendix G. Tank 241-BX-106 has 10 risers and one 12-in. riser (no. 2) is available for use.

2.6.2.1 Waste Layer Volume Approximation for Tank 241-BX-106

A comparative analysis of all layer approximations for the entire Tank Farm and the data used to derive the tank layer approximations are located in Appendix K.

2.6.2.2 In-Tank Photograph 241-BX-106

The 1988 photographic montage of the Tank 241-BX-106 interior indicates a dark liquid surface with a ring of sludge at the perimeter (see Appendix I). Quality of the photographs is poor and identifying tank contents and equipment is difficult; however, some equipment and tank features are visible and have been identified and labelled. This tank contains approximately 15,000 gallons of supernatant and 31,000 gallons of sludge, which measures roughly 1 ft in depth. There have been no changes in the tank which would affect the waste since these photographs were taken; therefore, the picture should be representative of the current tank contents.

2.6.3 Synopsis Tank 241-BX-106

(To be completed)

2.7 Tank 241-BX-107

2.7.1 241-BX-107 Tank History

2.7.1.1 Waste History Tank 241-BX-107

The waste history narrative in the following paragraph is from "A History of the 200 Area Tank Farms" (Anderson 1990). Tank 241-BX-107 began filling in September 1948. Between the third quarter of 1948 and the fourth quarter of 1952, the tank contained first-cycle waste. The tank cascaded into Tank-241-BX-108 until the second quarter of 1954 when the overflow outlet was plugged. Between the second quarter of 1953 and the fourth quarter of 1964, the tank contained U Plant waste. Between the second quarter of 1965 and the third quarter of 1968, the tank contained first-cycle waste and U Plant waste. From the third quarter of 1969 to the second quarter of 1976, the tank contained ion exchange waste. The tank was awaiting solidification from the fourth quarter of 1974 to the first quarter of 1975. Between the third quarter of 1975 and the fourth quarter of 1977, the tank contained evaporator feed waste. The tank was declared inactive in the first quarter of 1978 and it presently contains non-complexed waste.

The waste history narrative of the primary additions that follow in this paragraph are from the "Waste Status and Transaction Record Summary" (Agnew 1994). Tank 241-BX-107 received first-cycle waste from the third quarter of 1948 until the fourth quarter of 1950. During the second quarter of 1953, the tank received uranium recovery waste.

Level adjustments were completed in April 1982 and in April 1990. Jet pumping was completed in September 1990 and the tank was considered interim stabilized. In-tank photographs were taken on the following dates: August 1977, March 1979, January 1981, October 1986, and September 1990. Sketch ES-TKS-E33, which shows a graphical representation of the Tank 241-BX-107 level history, and the historical waste level data used to make it are in Appendix C. The sketch shows a pH reading of 10.2 in November 1974. Currently temperature readings are unavailable due to the thermocouples being out of service.

2.7.1.2 Temperature History 241-BX-107

The single tree in Tank 241-BX-107 has 14 thermocouple probes to monitor the waste temperature. Thermocouple probe elevations are not available. Thermocouples 1 through 12 have very similar temperature readings that span from 1975 to 1982. Thermocouples 13 and 14 span the same time frame but have fewer data points. No data points are available after 1982, although a thermocouple tree was detected in September 1990. Currently, all of the thermocouples are out of service and a work order was issued by September 1993 to correct the problem.

The mean temperature of the first daily recorded readings was 64°F. A sum of the squares regression line fit for the thermocouples shows a slight temperature increase with a moderate amount of variability. The median temperature is 69°F with a minimum of 46°F and a maximum of 88°F. Tank 241-BX-107 is scheduled to have semiannual temperature data taken in January and July.

Plots of the thermocouple readings for Tank 241-BX-107 are in Appendix D.

2.7.1.3 Integrity of Tank 241-BX-107

Tank 241-BX-107 is categorized as sound and is interim stabilized and partially isolated. The Tank 241-BX-107 surface level is monitored with a Food Instrument Corporation gauge and a manual tape. Liquid waste volume is determined by a photographic evaluation and a manual tape surface level gauge. Solid waste volume is determined by a photographic evaluation. If the Food Instrument Corporation gauge fails, manual field measurements are conducted on a daily basis. The maximum allowable deviations from the established 120.4-in. baseline are a 2-in. increase, and a 2-in. decrease. The figure that graphically represents the surface level measurements from January 1991 to the present is in Appendix E. The surface level readings have remained steady and range between 123.8 and 120.3 in.

Tank 241-BX-107 does not have a liquid observation well. Two drywells are identified for Tank 241-BX-107. Drywells 21-07-03 (no longer active) and 21-07-06 (active prior to 1990, current readings > 200 c/s) have or had readings greater than the 50 c/s background radiation.

Graphical representations of the active drywells from January 1990 to the present are in Appendix F. The graphs include the peak c/s (some wells have multiple peaks), the depth at which the peak occurred, and the date of the reading.

2.7.1.4 Historical Sample Analysis Data for Tank 241-BX-107

Five analyses for Tank 241-BX-107 were conducted between November 1974 and September 1980. In July 1979, three first-cycle bismuth phosphate waste core segments were analyzed. The solids were 45 percent water soluble. The main component of the water soluble portion was NaNO_3 . The main component of the insoluble solid material was BiPO_4 , with lesser amounts of Al^{3+} and Fe^{3+} compounds. In September 1980, samples from the tank were analyzed as part of an evaluation of laboratory methods. Five tables presenting the chemical and physical data obtained from these analyses are in Appendix H.

2.7.2 Current Status of Tank 241-BX-107

Tank 241-BX-107 entered service in September 1948 and currently stores 345,000 gal of waste. The waste is comprised of

1,000 gal of supernatant; 344,000 gal of sludge; and no saltcake with 23,000 gal of pumpable liquid remaining. The tank is identified as a low-heat load tank, is passively ventilated, and is categorized as sound with interim stabilization and partial interim isolation completed. Tank 241-BX-107 is equipped to cascade to Tank 241-BX-108 and is first in the three-tank cascade series. The plan view and tank cross-section that depict the approximate waste level and riser configuration are in Appendix G. Tank 241-BX-107 has 12 risers and three are available for use: two 12-in. risers, no. 3 and no. 7, and one 4-in. riser, no. 5.

2.7.2.1 Waste Layer Volume Approximation for Tank 241-BX-107

A comparative analysis of all layer approximations for the entire Tank Farm and the data used to derive the tank layer approximations are located in Appendix K.

2.7.2.2 In-Tank Photograph 241-BX-107

The 1990 assembled photographs of the Tank 241-BX-107 interior indicate a light-yellow glossy sludge surface with pockmarks (see Appendix I). The tank contains approximately 345,000 gal of waste which measures roughly 10 ft in depth. Pools of dark yellow liquid as seen at the base of the Food Instrument Corporation gauge, saltwell screen, temperature probe and one old level measure tape. The dark red material on the waste surface is probably a sprayed on plastic (fabri-form) which was used to fix contamination on equipment which had to be removed from tanks. The photographs were taken at about the same time the tank was jet pumped and interim stabilized; therefore, the picture may not represent the current tank contents.

2.7.3 Synopsis Tank 241-BX-107

(To be completed)

2.8 Tank 241-BX-108

2.8.1 241-BX-108 Tank History

2.8.1.1 Waste History Tank 241-BX-108

The waste history narrative in the following paragraph is from "A History of the 200 Area Tank Farms" (Anderson 1990). Tank 241-BX-108 began filling with first-cycle waste in the March 1949 and was full in September 1949. The tank transferred and received waste via the cascade lines from the first quarter of 1949 until the second quarter of 1953. The tank contained first-cycle waste until the fourth quarter of 1952. The supernatant was pumped from the tank and 23,000 gal were lost to the ground during the pumping operation. A heel of 11,000 gal remained in the tank in January 1993. Between the second quarter of 1953 and the fourth quarter of 1964, the tank contained U Plant waste. During the fourth quarter of 1957, the tank was scavenged for uranium recovery and the feed was pumped to the CR process vault. The tank contained coating waste from the second quarter of 1964 until the third quarter of 1968. Ion exchange waste was in the tank between the second quarter of 1969 and the first quarter of 1976. The tank was declared a suspect leaker in the fourth quarter of 1973 and was saltwell pumped in the third quarter of 1976. Presently, the tank contains non-complexed waste.

Tank 241-BX-108 did not receive any primary waste additions according to the "Waste Status and Transaction Record Summary" (Agnew 1994) report.

The tank was declared primary stabilized in 1978. A level adjustment was made in March 1978. Interim stabilization was completed after supernatant pumping and a level adjustment was made in July 1979. Intrusion prevention was completed in June 1981. Inconsistencies from past calculations were the cause of level changes in 1990. In-tank photographs were taken on the following dates: August 1973, two in 1974, February 1977, February 1980, April 1981, November 1982, and October 1986. Sketch ES-TKS-E34, which shows a graphical representation of the Tank 241-BX-108 level history, and the historical waste level data used to make it are in Appendix C. The sketch shows three pH readings: 9.3 in May 1955, 9.1 in December 1957, and 11.6 in November 1971. The current maximum temperature reading from July 1993 is 63° F.

2.8.1.2 Temperature History 241-BX-108

Tank 241-BX-108 contains one thermocouple tree with 14 thermocouple probes; however, no specific probe elevations are currently available. Thermocouples 1 through 12 have similar temperature readings that span from 1974 to 1993. Data for thermocouples 13 and 14 are not available. No data are available from 1981 to 1992, although there was a thermocouple tree was detected in the tank in October 1986. The thermocouples were out of service in January 1993 due to the absence of a relay box.

The mean temperature of the first daily recorded readings was 18°F. A significant temperature increase of 51°F occurred from April to July 1975. A sum of the squares regression line fit for the first 12 thermocouples shows a slight temperature increase with a moderate amount of variability. Not enough data points exist for an accurate regression and variability analysis on thermocouples 13 and 14. The median temperature is 69°F with a minimum of 54°F and a maximum of 90°F. Tank 241-BX-108 is scheduled to have semiannual temperature data taken in January and July.

Plots of the thermocouple readings for Tank 241-BX-108 are in Appendix D.

2.8.1.3 Integrity of Tank 241-BX-108

Tank 241-BX-108 is categorized as an assumed leaker and is interim stabilized with intrusion prevention completed. The Tank 241-BX-108 surface level is monitored quarterly with a manual tape. Liquid waste volume is determined by a manual tape surface level gauge, and solid waste volume is determined by a photographic evaluation and a sludge level measurement device. The maximum allowable increase from the 5.75-in. baseline is 2 in. There is no criterion for a decrease. The figure that graphically represents the surface level measurements from January 1991 to the present is in Appendix E. The surface level for the past 3 years has fluctuated between 4 and 6.5 in.

Tank 241-BX-108 does not have a liquid observation well. Seven drywells are identified for Tank 241-BX-108. Drywells 21-08-06 (no longer active) and 21-08-07 (active prior to 1990, current readings > 200 c/s) have or had readings greater than the 50 c/s background radiation.

A graphical representation of the active drywell from January 1990 to the present is in Appendix F. The graph includes the peak c/s (some wells have multiple peaks), the depth at which the peak occurred, and the date of the reading.

An occurrence report was issued in 1977 due to potential in-leakage from a broken water valve. The occurrence report indicated no visible effects of the in-leakage.

2.8.1.4 Historical Sample Analysis Data for Tank 241-BX-108

No data are available or applicable.

2.8.2 Current Status of Tank 241-BX-108

Tank 241-BX-108 entered service in 1949 and currently stores 26,000 gal of waste. The waste is comprised entirely of sludge with no pumpable liquid remaining. The tank is identified as a low-heat load tank, is passively ventilated, and is categorized as an assumed leaker with interim stabilization and intrusion prevention completed. Tank 241-BX-108 is equipped to cascade to

Tank 241-BX-109 and is second in the three-tank cascade series. The plan view and tank cross-section that depict the approximate waste level and riser configuration are in Appendix G. Tank 241-BX-108 has 11 risers and three 12-in. risers (nos. 2, 6, and 13) are available for use.

2.8.2.1 Waste Layer Volume Approximation for Tank 241-BX-108

A comparative analysis of all layer approximations for the entire Tank Farm and the data used to derive the tank layer approximations are located in Appendix K.

2.8.2.2 In-Tank Photograph 241-BX-108

The 1986 photographic montage of the Tank 241-BX-108 interior indicates a cream to medium brown pebbly sludge surface with a small pool of liquid at the center (see Appendix I). The tank contains approximately 26,000 gal of sludge which measures 6-in. deep. A temperature probe and a manual tape are identified and labelled and are the only apparatus seen in the tank. An old level tape and some debris are also labelled. There have been no changes in the tank which would affect the waste since these photographs were taken; therefore, the picture should be representative of the current tank contents.

2.8.3 Synopsis Tank 241-BX-108

(To be completed)

2.9 Tank 241-BX-109

2.9.1 241-BX-109 Tank History

2.9.1.1 Waste History Tank 241-BX-109

The waste history narrative in the following paragraph is from "A History of the 200 Area Tank Farms" (Anderson 1990). The tank was filled from the Tank 241-BX-108 cascade line with first-cycle waste from November 1950 until the first quarter of 1951. The tank contained first-cycle waste until the fourth quarter of 1952. Between the first quarter of 1953 and the third quarter of 1968, the tank received U Plant waste. The tank was pumped to a heel in the first quarter of 1953. The tank was used as a ferrocyanide scavenging process feed tank. In the fourth quarter of 1957, the in-farm scavenged waste was sent to Tank 241-C-101. The tank contained coating waste along with U Plant waste from the fourth quarter of 1964 until the third quarter of 1968. The tank contained ion exchange waste from the first quarter of 1969 through the first quarter of 1976. The tank waste was comprised mostly of salt in 1974. The tank was used as a phosphoric prototype in 1975. A longer saltwell was needed in 1977. In 1978, the tank was inactive, a saltwell was installed, and a pump was removed. The tank waste is currently classified as non-complexed.

The waste history narrative of the primary additions that follow in this paragraph are from the "Waste Status and Transaction Record Summary" (Agnew 1994). Tank 241-BX-109 received uranium recovery waste from the first quarter of 1953 until the third quarter of 1954. From the fourth quarter of 1967 until the first quarter of 1969, the tank received cesium recovery waste. The tank received wastewater during the second quarter of 1973.

A level adjustment was made in April 1982. The tank was interim stabilized in September 1990 after supernatant pumping was completed. Another level adjustment was made in September 1990. In-tank photographs were taken on the following dates: December 1973, November 1975, December 1980, May 1983, May 1986, and September 1990. Sketch ES-TKS-E35, which shows a graphical representation of the Tank 241-BX-109 level history, and the historical waste level data used to make it are in Appendix C. The sketch shows five pH readings: 10.4 in May 1955, 9.4 in December 1957, 12.3 in May 1965, 10.7 in November 1971, and <12.0 in May 1975. The current maximum temperature reading from July 1993 is 77° F.

2.9.1.2 Temperature History 241-BX-109

A single thermocouple tree in Tank 241-BX-109 contains 11 thermocouple probes to measure in-tank temperatures. No specific probe elevations for the tank are currently available. One temperature reading was recorded from the available probes in July 1993. The median temperature was 76°F with a minimum of 74°F and a maximum of 76.7°F. Although one recorded reading is available,

two thermocouple trees were detected in September 1990. The thermocouples were out of service in January 1991 due to the absence of a relay box. A regression and variability assessment is not possible because only one data point is available for each thermocouple. No trends are apparent from the data at this time. Tank 241-BX-109 is scheduled to have temperature data taken semiannually in January and July. There are no plots of the thermocouple readings for Tank 241-BX-109 in Appendix D.

2.9.1.3 Integrity of Tank 241-BX-109

Tank 241-BX-109 is categorized as sound and is interim stabilized and partially isolated. The Tank 241-BX-109 surface level is monitored with a Food Instrument Corporation gauge through riser 1. Liquid waste volume is determined by a Food Instrument Corporation gauge and a photographic evaluation, and solid waste volume is determined by a photographic evaluation. If the Food Instrument Corporation gauge fails, manual field measurements will be conducted quarterly. The maximum allowable deviations from the established 65.3-in. baseline are a 2-in. increase and 2-in. decrease. The figure that graphically represents the surface level measurements from January 1991 to the present is in Appendix E. The surface level readings remained steady with the readings ranging from 65.1 to 66.8 in.

Tank 241-BX-109 does not have a liquid observation well. Four drywells are identified for Tank 241-BX-109, but none of them have or had readings greater than the 50 c/s background radiation.

2.9.1.4 Historical Sample Analysis Data for Tank 241-BX-109

In May 1975, a liquid sample from Tank 241-BX-109 was analyzed. The sample contained soluble ²³⁹Pu in greater than the maximum permissible concentration in water. Soluble ²³⁹Np and ²⁴¹Am were below or near the maximum permissible concentration. A table presenting the results of this analysis will be found in Appendix H.

2.9.2 Current Status of Tank 241-BX-109

Tank 241-BX-109 entered service in 1950 and currently stores 193,000 gal of waste. The waste is comprised entirely of sludge with 8,000 gal of pumpable interstitial liquid remaining. This tank is identified as a low-heat load tank, is passively ventilated, and is categorized as sound with interim stabilization and partial interim isolation completed. Tank 241-BX-109 is third in the three-tank cascade series. Tank 241-BX-109 cascades to Tank 241-BY-107. The plan view and tank cross-section that depict the approximate waste level and riser configuration are in Appendix G. Tank 241-BX-109 has 10 risers and four are available for use: one 4-in. riser (no. 1), and three 12-in. risers (nos. 2, 6, and 7).

2.9.2.1 Waste Layer Volume Approximation for Tank 241-BX-109

A comparative analysis of all layer approximations for the entire Tank Farm and the data used to derive the tank layer approximations are located in Appendix K.

2.9.2.2 In-Tank Photograph 241-BX-109

The 1990 assembled photographs of the Tank 241-BX-109 interior indicates a pock-marked-sludge surface with pools and rivulets of clear brown liquid (see Appendix I). Approximately 193,000 gal or 5.5 ft of sludge are in the tank. Temperature probes, a Food Instrument Corporation gauge, a saltwell screen and a pump are visible and identified and labelled. A flange gasket and two discarded level measurement tapes are lying on the waste surface. Waste level adjustments were made as a result of these photos; therefore, the picture may not represent the current tank contents.

2.9.3 Synopsis Tank 241-BX-109

(To be completed)

2.10 Tank 241-BX-110

2.10.1 241-BX-110 Tank History

2.10.1.1 Waste History Tank 241-BX-110

The waste history narrative in the following paragraph is from "A History of the 200 Area Tank Farms" (Anderson 1990). Tank 241-BX-110 was filled with first-cycle waste from September 1949 to January 1950. From the third quarter of 1949 to the first quarter of 1954, the tank contained first-cycle waste. The tank periodically cascaded to Tank 241-BX-111 from the first quarter of 1951 through the second quarter of 1954. In the fourth quarter of 1957, scavenged feed was sent to the CR process vault. The tank also contained first-cycle waste from the second quarter of 1963 to the fourth quarter of 1964. Between the second quarter of 1954 and the fourth quarter of 1964, the tank contained evaporator bottoms waste. The tank contained coating waste from the second quarter of 1965 to the third quarter of 1968 and ion exchange waste from the first quarter of 1969 to the first quarter of 1970. From the first quarter of 1972 to the second quarter of 1976, the tank contained in-tank solidification bottoms waste and recycle waste. In 1976, the tank was termed an assumed leaker and activity was restricted due to approximately 8,000 gal of waste that had leaked from the tank. The tank was removed from service in 1977. In the second quarter of 1977, the tank was declared inactive and a saltwell and saltwell pump were installed. From the third quarter of 1976 to the fourth quarter of 1977, the tank contained evaporator feed waste. In the third and fourth quarters of 1977 and the first quarter of 1978, the tank was considered inactive with the saltwell installed. Presently, the tank contains non-complexed waste.

The waste history narrative of the primary additions that follow in this paragraph are from the "Waste Status and Transaction Record Summary" (Agnew 1994). Tank 241-BX-110 received first-cycle waste from the third quarter of 1949 until the second quarter of 1950. From the fourth quarter of 1961 until the first quarter of 1968, the tank received wastewater. During the first quarter of 1969, the tank received cesium recovery waste.

In the second quarter of 1979, the tank integrity was questionable. In March 1980, the tank was primary stabilized and partial isolation was completed in December 1982. A level adjustment was performed in December 1984. In August 1985, interim stabilization was achieved after supernatant pumping was completed. A level adjustment was performed in August 1985. In December 1993, the remaining 1,000 gal of supernatant were pumped from the tank. In-tank photographs were taken on the following dates: September 1971, two in 1977, January 1978, two in 1980, January 1981, February 1982, December 1984, and July 1985. Sketch ES-TKS-E36, which shows a graphical representation of the Tank 241-BX-110 level history, and the historical waste level data used in making it are in Appendix C. The sketch shows three pH readings: 12.1 in

May 1965, 11.8 in November 1971, and >14.0 in May 1975. The current maximum temperature reading from July 1993 is 68° F.

2.10.1.2 Temperature History 241-BX-110

Tank 241-BX-110 contains a single thermocouple tree with 12 thermocouple probes to monitor the waste temperature. Elevations are available for all the thermocouple probes. The thermocouples probes have similar readings. No data are available from 1983 to 1989, although a thermocouple tree was detected in the tank during July 1985.

Review of the Tank 241-BX-110 level history indicates that from October 1971 to January 1972, thermocouples 1 and 2 were in or near the solids level, thermocouple 3 was in or near the liquid level, and thermocouples 4 through 12 appear to have been in the vapor space. From the solids level spike between January 1972 and April 1972, thermocouples 1 through 4 were in or near the solids level, thermocouples 5 through 7 were in or near the liquid level, and the rest appear to have been in the vapor space. Thermocouples 1 through 3 were in or near the solids level, thermocouples 4 through 7 were in or near the liquid level, and the rest appear to have been in the vapor space from April 1972 to January 1974. Due to a solid level increase between January and October 1974, thermocouples 1 to 4 were in or near the solids level, thermocouples 5 through 7 were in or near the liquid level, and the rest appear to have been in the vapor space. Thermocouples 1 through 3 were in or near the solids level, thermocouples 4 through 7 were in or near the liquid level, and the rest appear to have been in the vapor space from October 1974 to March 1977. From March 1977 to January 1980, the liquid dropped to the solid level leaving thermocouples 1 through 3 in or near the solid level and the remaining thermocouples appearing in the vapor space. Thereafter, only thermocouples 1 through 3 appear to have been in the solids level.

The mean temperature of the first daily recorded readings was 125°F. A sum of the squares regression line fit for the thermocouples shows a slight temperature decrease with a moderate to large amount of variability. A large decrease of 103°F is evident from the start of the readings in October 1971 to October 1974. In addition, a significant increase of 52°F is evident from April 1974 to July 1975. The data reveal an annual temperature undulation that became evident in January 1989. The median temperature is 65.1°F with a minimum of 55°F and a maximum of 125°F. Tank 241-BX-110 was on the Ferrocyanide Watch List and is monitored weekly.

Plots of the thermocouple readings for Tank 241-BX-110 are in Appendix D.

2.10.1.3 Integrity of Tank 241-BX-110

Tank 241-BX-110 is categorized as an assumed leaker and is interim stabilized with partial isolation completed. The Tank 241-BX-110 surface level is monitored daily with a manual tape. Liquid waste volume is determined by a manual tape surface level gauge and a photographic evaluation, and solid waste volume is determined by a manual tape surface level gauge. The maximum allowable deviations from the baseline value are a 2-in. increase and a 2-in. decrease. The baseline will be re-established at the conclusion of the current emergency pumping effort initiated at Tank 241-BX-111. The figure that graphically represents the surface level measurements from January 1991 to the present is in Appendix E. The surface level readings for the past 3 years have remained steady, ranging from 68 to 69 in.

Tank 241-BX-110 does not have a liquid observation well. Five drywells are identified for Tank 241-BX-110. Drywells 21-10-01, 21-10-03, and 21-10-05 were active prior to 1990 and they have readings greater than 200 c/s.

An occurrence report was issued in January 1980 due to a liquid level increase that exceeded the criterion. The cause of the intrusion was attributed to rapid snow melt runoff through a pump pit under construction.

Another occurrence report was issued in January 1981 due to a liquid level increase that exceeded the criterion. The cause of the intrusion was attributed to precipitation through riser 9 in the new pump pit mentioned above.

Graphical representations of the active drywell from January 1990 to the present are in Appendix F. Each graph includes the peak c/s (some wells have multiple peaks), the depth at which the peak occurred, and the date of the reading.

2.10.1.4 Historical Sample Analysis Data for Tank 241-BX-110

Between May 1975 and September 1980, three samples from Tank 241-BX-110 were analyzed and the results are included in this report. The first analysis was conducted only on a liquid. The sample contained soluble ^{239}Pu of greater than the maximum permissible concentration in water. Soluble ^{239}Np and ^{241}Am were below or near the maximum permissible concentration. A sludge sample evaluated in 1979 was yellowish to dull gray and it had a small number of large red crystals on top and a consistency of soft putty. Approximately 40% by weight of the solid was water soluble and composed primarily of Fe^{++} and SiO_2 . In September 1980, samples were taken from twelve tanks, including Tank 241-BX-110, for an evaluation of laboratory methods. Six tables presenting the results of the three analyses described are in Appendix H.

2.10.2 Current Status of Tank 241-BX-110

Tank 241-BX-110 entered service in 1949 and currently stores 199,000 gal of non-complexed waste. The waste is comprised of 1,000 gal of supernatant; 42,000 gal of saltcake; and 156,000 gal of sludge with 10,000 gal of pumpable liquid remaining. The tank is identified as a low-heat load tank, is passively ventilated, and is categorized as an assumed leaker with interim stabilization and partial interim isolation completed. Tank 241-BX-110 is equipped to cascade to Tank 241-BX-111 and is the first in the three-tank cascade series. The plan view and tank cross-section that depict the approximate waste level and riser configuration are in Appendix G. Tank 241-BX-110 has 11 risers and two 12-in. risers (nos. 3, and 6) are available for use.

2.10.2.1 Waste Layer Volume Approximation for Tank 241-BX-110

A comparative analysis of all layer approximations for the entire Tank Farm and the data used to derive the tank layer approximations are located in Appendix K.

2.10.2.2 In-Tank Photograph 241-BX-110

The 1988 photographic montage of the Tank 241-BX-110 interior indicates translucent pools of liquid on an irregular solid surface (see Appendix I). Light colored saltcake clings to the perimeter of the tank. The manual tape, some discarded measurement tapes, a temperature probe, a salt well screen and some nozzles are all visible and labelled. Approximately 199,000 gal of waste are in the tank and the waste measures 5.5 ft deep. The photographs were taken before supernatant was pumped from the tank; therefore, the picture may not represent the current tank contents.

2.10.3 Synopsis Tank 241-BX-110

(To be completed)

2.11 Tank 241-BX-111

2.11.1 241-BX-111 Tank History

2.11.1.1 Waste History Tank 241-BX-111

The waste history narrative in the following paragraph is from "A History of the 200 Area Tank Farms" (Anderson 1990). Tank 241-BX-111 was filled with first-cycle waste from Tank 241-BX-110 from January and May 1950. From the first quarter of 1950 to the first quarter of 1954, the tank contained first-cycle waste. From the second quarter of 1954 to the third quarter of 1957, the tank contained first-cycle waste and evaporative bottoms waste. In the fourth quarter of 1957, scavenged waste was sent to the CR process vault. From the fourth quarter of 1961 to the fourth quarter of 1964, the tank contained first-cycle waste. From the second quarter of 1964 to the second quarter of 1971, the tank contained coating waste. The tank also contained ion exchange waste from the second quarter of 1969 to the second quarter of 1970. In 1976, the tank integrity was questionable. From the third quarter of 1971 to the second quarter of 1976, the tank contained evaporative bottoms waste. The tank contained in-tank solidification bottoms waste and recycle waste from the first quarter of 1972 to the second quarter of 1976. In 1977, the tank was removed from service. In the second quarter of 1977, the tank was termed active restricted and a level adjustment was performed on the tank in July 1977. From the third quarter of 1976 to the fourth quarter of 1977, the tank contained evaporative feed waste. From the first quarter of 1977 to the first quarter of 1978, a saltwell was installed in the tank. In the first quarter of 1978, the tank was considered inactive. The tank was termed as having questionable integrity in the second quarter of 1978. Presently, the tank contains non-complexed waste.

Tank 241-BX-111 did not receive any primary waste additions according to the "Waste Status and Transaction Record Summary" (Agnew 1994) report.

The tank was partially isolated in 1982. In 1984, the tank was declared an assumed leaker after leaking approximately 8,000 gal. In July 1985, supernatant pumping was unsuccessful. In October 1993, the remaining 19,000 gal of supernatant were pumped from the tank. The plotted liquid observation well data represent the supernatant level. The data follow the supernatant level closely. In-tank photographs were taken on the following dates: September 1971, September 1973, May 1974, several in 1977, March 1980, February 1981, December 1982, September 1985, and July 1993. Sketch ES-TKS-E37, which shows a graphical representation of the Tank 241-BX-111 level history, and the historical waste level data used in making it are in Appendix C. The sketch shows three pH readings on the level history: 8.2 in December 1957, 12.1 in May 1965, and >14.0 in June 1976. The current maximum temperature reading from July 1993 is 65° F.

2.11.1.2 Temperature History 241-BX-111

Tank 241-BX-111 contains a single thermocouple tree with 12 thermocouple probes to monitor the waste temperature. Elevations are available for all the thermocouple probes. The thermocouples have similar readings that span from 1974 to the present. No are available from 1984 to 1989. Review of the Tank 241-BX-111 level history indicates that from October 1974 to October 1977, thermocouples 1 through 3 were in or near the solids level, thermocouples 4 through 8 were in or near the liquid level, and thermocouples 9 through 12 were in the vapor space. Thereafter, due to a liquid level decrease, thermocouples 1 through 3 were in or near the solid level and the rest were in the vapor space.

The mean temperature of the first daily recorded readings was 29°F. A sum of the squares regression line fit for the thermocouples shows a slight temperature decrease with a moderate amount of variability. A significant temperature increase of 50°F occurred between December 1974 and February 1975. The next reading, taken in April 1975, dropped 55°F before rising back to 45°F in April 1976. The data reveal an annual temperature undulation that becomes more evident in January 1989. A suspect data point of 36°F exists for all thermocouples in December 1993. The median temperature is 67.2°F with a minimum of 58.7°F and a maximum of 89°F. Tank 241-BX-111, formerly on the Ferrocyanide Watch List, has weekly temperature monitoring requirements.

Plots of the thermocouple readings for Tank 241-BX-111 are in Appendix D.

2.11.1.3 Integrity of Tank 241-BX-111

Tank 241-BX-111 is categorized as an assumed leaker and is partially isolated. The Tank 241-BX-111 surface level is monitored daily with a manual tape. The maximum allowable deviations from the baseline are a 2-in. increase and a 1-in. decrease. The baseline will be re-established upon conclusion of the current emergency pumping effort. The figure that graphically represents the surface level measurements from January 1991 to the present is in Appendix E. During the fourth quarter of 1993, the surface level readings decreased from 80 to 74.25 in. which corresponds with the pumping efforts.

An off-normal occurrence report was issued in March 1993 due to a liquid level decrease which changed from the previous trend. The tank was declared an assumed re-leaker in April 1993 and emergency pumping efforts were initiated.

The liquid observation well for Tank 241-BX-111 is located in riser 5. The interstitial liquid level is monitored weekly with a neutron probe and on request with a gamma probe. The maximum allowable deviations from the baseline value are a 0.3-ft decrease and a 0.4-ft increase. Sketch ES-TKS-E37 in Appendix C has a graphical representation of the liquid observation well data.

Six drywells are identified for Tank 241-BX-111. Drywells 21-11-03 (active prior to 1990, current readings > 200 c/s), 22-11-04 (active prior to 1990, current readings > 200 c/s), 21-11-05 (active prior to 1990, current readings < 200 c/s), and 21-11-07 (no longer active) have or had readings greater than the 50 c/s background radiation.

Graphical representations of the active drywells from January 1990 to the present are in Appendix F. Each graph includes the peak c/s (some wells have multiple peaks), the depth at which the peak occurred, and the date of the reading.

2.11.1.4 Historical Sample Analysis Data for Tank 241-BX-111

No data are available or applicable.

2.11.2 Current Status of Tank 241-BX-111

Tank 241-BX-111 entered service in 1950 and currently stores 230,000 gal of waste. The waste is comprised of 19,000 gal of supernatant; 179,000 gal of saltcake; and 32,000 gal of sludge with 39,000 gal of pumpable liquid remaining. The tank is identified as a low-heat load tank, is passively ventilated, and is categorized as an assumed leaker with partial interim isolation completed. Tank 241-BX-111 is equipped to cascade to Tank 241-BX-112 and is second in the three-tank cascade series. The plan view and tank cross-section that depict the approximate waste level and riser configuration are in Appendix G. Tank 241-BX-111 has 11 risers and two 12-in. risers, no. 3, and no. 6 are available for use.

2.11.2.1 Waste Layer Volume Approximation for Tank 241-BX-111

A comparative analysis of all layer approximations for the entire Tank Farm and the data used to derive the tank layer approximations are located in Appendix K.

2.11.2.2 In-Tank Photograph 241-BX-111

The 1993 photographic montage of the Tank 241-BX-111 interior indicates a mostly liquid surface with a small amount of solid crystalline material precipitated around the perimeter of the tank and in patches floating on the liquid surface (see Appendix I). The liquid may be dark brown, however, true colors are difficult to determine because of poor quality pictures. The waste measures approximately 6 ft deep. Saltwell screens, a LOW, a temperature probe and a manual tape have been identified and labelled. These photographs were taken in 1988 and there has not been any activity in the tank since then; therefore, the picture should be representative of the current tank contents.

2.11.3 Synopsis Tank 241-BX-111

(To be completed)

2.12 Tank 241-BX-112

2.12.1 241-BX-112 Tank History

2.12.1.1 Waste History Tank 241-BX-112

The waste history narrative in the following paragraph is from "A History of the 200 Area Tank Farms" (Anderson 1990). Tank 241-BX-112 was filled with first-cycle waste during 1951. Between the second quarter of 1952 and the second quarter of 1954, the tank contained first-cycle waste. During the fourth quarter of 1953, the supernatant was pumped to a ditch. The tank contained first-cycle waste and evaporator bottoms waste from the third quarter of 1954 to the second quarter of 1964. The tank was declared a spare for U Plant scavenged waste in 1954. From the second quarter of 1965 until the second quarter of 1968, the tank contained first-cycle evaporator bottoms waste and coating waste. From the third quarter of 1968 until the second quarter of 1976, the tank contained evaporator bottoms waste and ion exchange waste. In the fourth quarter of 1974, the tank was awaiting solidification. The tank contained dilute evaporator feed from the third quarter of 1976 until the fourth quarter of 1977. A saltwell was installed in 1977 and 1978. The tank was declared inactive in 1977. Presently, the tank contains non-complexed waste.

The waste history narrative of the primary additions that follow in this paragraph are from the "Waste Status and Transaction Record Summary" (Agnew 1994). Tank 241-BX-112 received first-cycle waste during the third and fourth quarters of 1951. During the first quarter of 1968, the tank received wastewater.

A level adjustment was made in November 1978. Interim stabilization was completed after saltwell pumping in September 1980. Another level adjustment was made in September 1990. In-tank photographs were taken on the following dates: two in 1974, August 1977, March 1980, May 1983, July 1985, and September 1990. Sketch ES-TKS-E38, which shows a graphical representation of the Tank 241-BX-112 level history, and the historical waste level data used in making it are in Appendix C. The sketch shows two pH readings: 11.8 in May 1965, and 9.7 in November 1971. The current maximum temperature reading from July 1993 is 62° F.

2.12.1.2 Temperature History 241-BX-112

The single thermocouple tree in Tank 241-BX-112 contains 14 thermocouple probes to monitor the waste temperature. Thermocouple probe elevations are not available. Thermocouples 1 through 12 have similar temperature readings that span from 1974 to the present. Data for thermocouples 13 and 14 are available between 1977 and 1979. No data are available from 1984 to 1991, although a thermocouple tree was detected in the tank during September 1990.

The mean temperature of the first data recorded for thermocouples 1 through 12 was 14°F. A sum of the squares

regression line fit for the first 12 thermocouples shows a slight temperature increase with a moderate amount of variability. There is a significant temperature increase of 45°F for thermocouples 1 through 12 from April 1975 to February 1976. There was no relay box in January 1993, rendering all the thermocouples out of service. The median temperature is 64°F with a minimum of 49°F and a maximum of 90°F. Tank 241-BX-109 is scheduled to have semiannual temperature data taken in January and July.

Plots of the thermocouple readings for Tank 241-BX-112 are in Appendix D.

2.12.1.3 Integrity of Tank 241-BX-112

Tank 241-BX-112 is categorized as sound and is interim stabilized and partially isolated. The Tank 241-BX-112 is monitored with a Food Instrument Corporation gauge through riser 8. Liquid waste volume is determined by a Food Instrument Corporation gauge and a photographic evaluation and solid waste volume is determined by a photographic evaluation. If the Food Instrument Corporation gauge fails, manual field measurements will be conducted quarterly. The maximum allowable deviations from the established 55.2-in. baseline are a 2-in. increase and a 3-in. decrease. The figure that graphically represents the surface level measurements from January 1991 to the present is in Appendix E. The surface level for the past 3 years indicates a decreasing trend during 1993. The readings range from 55.4 to 55.3 in. during the fourth quarter of 1992 and steadily decrease to 55 in. during the fourth quarter of 1993.

Tank 241-BX-112 does not have a liquid observation well. Five drywells are identified for Tank 241-BX-112. No drywells have or had readings greater than the 50 c/s background radiation.

2.12.1.4 Historical Sample Analysis Data for Tank 241-BX-112

A composite sample from Tank 241-BX-112 made up from three core segments was analyzed in August 1979. Chemical and physical property data including the heat generation rate from ^{87}Sr and ^{137}Cs were determined for the composite. The sample was light yellow sludge with the consistency of soft putty. The sludge solids were 24 percent water soluble. The primary components of the water soluble portion of the sludge were Na^+ , NO_3^- , and PO_4^{3-} . The water insoluble portion consisted of Al^{3+} , Bi^{3+} , F^- , NO_3^- , PO_4^{3-} , and Si^{4+} . In September 1980, tank samples were analyzed as part of an evaluation of laboratory methods. Two tables presenting the results of these analyses are in Appendix H.

2.12.2 Current Status of Tank 241-BX-112

Tank 241-BX-112 entered service in 1950 and currently stores 165,000 gal of waste. The waste is comprised of 1,000 gal of supernatant; 32,000 gal of unknown waste; 132,000 gal of sludge; and no saltcake with 2,000 gal of pumpable liquid remaining. This

tank is identified as a low-heat load tank, is passively ventilated, and is categorized as sound with interim stabilization and partial interim isolation completed. Tank 241-BX-112 is third in the three-tank cascade series. Tank 241-BX-112 cascades to Tank 241-BY-110. The plan view and tank cross-section that depict the approximate waste level and riser configuration are in Appendix G. Tank 241-BX-112 has 9 risers and three 12-in. risers (nos. 2, 3, and 7) are available for use.

2.12.2.1 Waste Layer Volume Approximation for Tank 241-BX-112

A comparative analysis of all layer approximations for the entire Tank Farm and the data used to derive the tank layer approximations are located in Appendix K.

2.12.2.2 In-Tank Photograph 241-BX-112

The assembled 1990 photographs from the Tank 241-BX-112 interior indicates a gray or brown solid waste intermixed with pools of dark yellow translucent liquid (see Appendix I). two saltwell screens, a temperature probe, an Food Instrument Corporation level probe and some nozzles have been identified and labelled as well as some discarded level measurement tapes and other debris. The tank contains approximately 165,000 gal of waste which corresponds with a depth of about 4.5 ft. The waste level base line was adjusted as a result of the photograph, and since this was the last recorded adjustment, this picture may be a true representation of the tank surface.

2.12.3 Synopsis Tank 241-BX-112

(To be completed)

GLOSSARY

0.17	Transaction flag key-monthly volumes derived from semiannual reports.
0.33	Transaction flag key-monthly volumes derived from quarterly reports.
1	Monthly report.
1AYIN	See Waste Abbreviations.
1AZIN	See Waste Abbreviations.
1C	See Waste Abbreviations.
1CEB	See Waste Abbreviations.
1CS	See Waste Abbreviations.
1st Generation Tank	The original tank design encompassing Tank Farms B, C, T, U (excluding the 200 series tanks), and BX. These tanks have an operating capacity of 530,000 gal, a 75-ft diameter, a 12-in. dish bottom, and a 4-ft knuckle. Also see Type II tanks.
222-B	See Facilities.
222-C	See Facilities.
222-T	See Facilities.
222-U	See Facilities.
224	See Waste Abbreviations.
224-F	See Waste Abbreviations.
231Z	See Waste Abbreviations.
242-A	See Facilities.
242-B	See Facilities.

242-S	See Facilities.
242-T	See Facilities.
2AYIN	See Waste Abbreviations.
2AZIN	See Waste Abbreviations.
2C	See Waste Abbreviations.
2nd Generation Tank	Same as original tank design (1st generation, or type II) except the operating capacity was increased to 758,000 gal. Also see Type III tanks.
2SYIN	See Waste Abbreviations.
3	Quarterly report.
3AWIN	See Waste Abbreviations.
3rd Generation Tank	The first generation of the type IV tanks, contains the SX Tank Farm only. These tanks have a 1,000,000 gal operating capacity, a 75-ft diameter, a 14.875-in. dish bottom, and no knuckle. Also see Type IV tanks.
4th Generation Tank	The second generation of the type IV tanks, contains the A Tank Farm only. These tanks are the same as the 3rd generation except they have a flat bottom. Also see Type IV tanks.
5	See Waste Abbreviations.
5-6#	Cells 5 and 6 from B-Plant.
5AWIN	See Waste Abbreviations.
5th Generation Tank	The third generation of the type IV tanks, contains the AX Tank Farm only. These tanks are the same as the 4th generation with the addition of grid drain slots beneath the steel liner bottom.
6	Semiannual report.

6AWIN	See Waste Abbreviations.
A Plant (PUREX)	See Facilities.
A1 SLTCK	See LANL Defined Waste List.
A2 SLTSLRY	See LANL Defined Waste List.
Active Tank	A tank that contains more than 33,000 gal of waste and/or is still involved in waste management operations.
Active Drywell	Drywell in which radiation readings of greater than 50 counts/second are detected. To be considered active, the readings must be consistent as to depth and radiation level for repeated readings.
ADD	Add primary waste from process.
ADJ	Adjustment to waste amount-see CORR.
AGE, AGING	Waste Abbreviation.
Aging Waste	High-level, first-cycle solvent extraction waste from the PUREX Plant (NCAW).
Airlift Circulator	The airlift circulators are installed in tanks used to age wastes. The circulators promote mixing of the supernate and prevent agglomeration of radionuclides. By maintaining motion within the body of liquid, the circulators minimize superheat buildup and, consequently, minimize bumping.
Annulus	A vessel space in the form of a ring; the space between concentric walls.
AR Vault	A structure containing tanks and chemical processing equipment that is used for waste processing or storage operations.
AR	See LANL Defined Waste List.

Assumed Leaker	A waste storage tank for which surveillance data, in the past, has indicated a loss of liquid attributed to a breach of integrity.
Assumed Re-leaker	A designation that exists after a tank has been declared an "assumed leaker" and then the surveillance data indicate a new loss of liquid attributed to a breach of integrity.
Assumed Leaking Tank	In 1984, the criteria designations of "suspect leaker," "questionable integrity," "confirmed leaker," "declared leaker," "borderline," and "dormant" were merged into one category now reported as "assumed leaker."
B SLTCK	See LANL Defined Waste List.
B	See Waste Abbreviations.
B Plant (222-B)	See Facilities.
B860N	See Waste Abbreviations.
Background Radiation	Radioactivity from naturally occurring sources; primarily radiation from cosmogenic and naturally occurring radionuclides.
Baseline	A reference; for example, a specified liquid level or radiation level against which new information is compared.
BFSH	See Waste Abbreviations.
BL	See Waste Abbreviations.
BLEB	See Waste Abbreviations.
BLIX	See Waste Abbreviations.
BLIXB	See Waste Abbreviations.
BNW	Battelle Northwest Laboratory.
BNW	See Waste Abbreviations.

BPDDC	See Waste Abbreviations.
BPDCS	See Waste Abbreviations.
BPDCV	See Waste Abbreviations.
BPFPS	See Waste Abbreviations.
BPLCS	See Waste Abbreviations.
BPLDC	See Waste Abbreviations.
BPLDN	See Waste Abbreviations.
Bumping, Tank Bump	A tank bump occurs when solids overheat in the lower portion of the tank. The hot solids rapidly transfer heat to the liquid, some of which quickly vaporizes. The sudden pressurization caused by vapor generation is called a "bump".
BVCLN	See Waste Abbreviations.
BY SLTCK	See LANL Defined Waste List.
C Plant (222-C)	See Facilities.
C PLANT	See SSW.
Caisson	An underground structure used to store high-level waste; typical designs include corrugated metal or concrete cylinders, 55-gal drums welded end-to-end, and vertical steel pipes below grade.
Calcine	To heat a substance to a high temperature, but below its melting point, causing loss of volatile constituents such as moisture; refers also to the material produced by this process.
CARB	See Waste Abbreviations.
CAS	Cascade-see SET and END. This process filled three tanks with one pump using overflow siphoning. Normal use was with

a sequence of tanks such as 101, 102, 103, or 110, 111, 112.

Cascade	Eleven of the single-shell tank farms (all except the AX Tank Farm) were equipped with overflow lines between tanks. The tanks were connected in series and were placed at different elevations creating a downhill gradient for liquids to flow from one tank to another.
CASS	Acronym for Computer Automated Surveillance System.
Catch Tanks	Small capacity single-shell tanks associated with diversion boxes and diverter stations. The tanks are designed to receive any transfer line cleanout, spills or leakage from the boxes, or leakage from the adjacent pipe encasement.
CAW	Current acid waste; this is PUREX acid HLW.
CC	See Waste Abbreviations.
CCGL	See Waste Abbreviations.
CCGR	See Waste Abbreviations.
CCPL	See Waste Abbreviations.
CCPLX	See Waste Abbreviations.
CCW	Concentrated customer waste.
CDF	Composition data file or transaction flag key-unit volume assumed to make stream active.
CE	See Waste Abbreviations.
CELL 23	Waste from cell 23 at B-Plant. Cell 23 contained an evaporator.
CEM	See Waste Abbreviations.

CF	See Waste Abbreviations.
CON	See Waste Abbreviations.
COND	Condensate-see EVAP, EB.
Condensate	Liquid formed from cooling vapors.
Conductivity Probe	A device that completes an electrical circuit when contacted by a conductive material.
Confirmed or Storage Declared Leaker	The designation of any underground waste tank where the data are considered sufficient to support a conclusion with 95 percent confidence that the tank has leaked.
COOL	Change in waste volume due to cooling. See CORR.
CORR	Correction to waste amount-see ADJ, LEAK, COOL.
CP	See Waste Abbreviations.
CPLX	See Waste Abbreviations.
CR Vault	Facility located adjacent to C Farm, used for scavenging campaign following uranium recovery. Ferrocyanide was added to tank supernatants in CR Vault and the slurry was returned to C-Farm.
Crib	A linear excavation approximately 15 ft in depth, with a perforated pipe in the bottom. The ditch is backfilled with broken rock or other loose material and then covered by soil and by a liquid impermeable membrane; the pipe is then used to distribute intermediate level liquid wastes along the crib.
Crust	A hard surface layer that has formed on top of the liquid in many waste tanks that contain concentrated solutions.
CSFD	See Waste Abbreviations.

CSR	See Waste Abbreviations.
CST	See Waste Abbreviations.
CSWLE	See Waste Abbreviations.
CSWLW	See Waste Abbreviations.
CTW	Caustic waste for makeup.
CW	See Waste Abbreviations
CWP	See Waste Abbreviations.
CWP/ZR	See Waste Abbreviations.
CWP2	See LANL Defined Waste List.
CWR	See Waste Abbreviations.
CX70	See Waste Abbreviations.
D	Transaction Flag Key-Amount by difference.
DBP	Dibutyl phosphate.
DC	See Waste Abbreviations.
DCS	Acroynm for dilute caustic solutions
DE	Acronym for diatomaceous earth that was added to Tanks 241-BX-102, -SX-113, -TX-106, and -U-104 from 1970 to 1972.
DE	See LANL Defined Waste List.
Deliquescent	A solid that is capable of absorbing moisture from the air and becoming a liquid.
Desiccant	A drying agent such as diatomaceous earth.
Diatomaceous Earth	Diatomite, a light friable siliceous material, derived chiefly from diatom (algae) remains that is added to selected underground waste storage tanks

to absorb and, thereby, immobilize residual liquids (i.e help to stabilize the tank).

DBP	Dibutyl phosphate.
DIL	Dilution
DILFD	Dilute feed
Ditch	A linearly oriented excavation often used for the temporary diversion or disposal of process waste streams.
Diversion Box	A below grade concrete enclosure containing the remotely maintained jumpers and spare nozzles for the routing of waste solution to storage tank farms.
DN/PT	See Waste Abbreviations.
DN/PD	See Waste Abbreviations.
DN	See Waste Abbreviations.
Double-Shell Tank	The newer underground waste storage tanks consisting of a concrete shell and two concentric carbon steel liners with an annular space between the liners.
Double-Shell Slurry	Waste that exceeds the sodium aluminate saturation boundary in the evaporator without exceeding receiver tank composition limits. For reporting purposes, DSS is considered a solid.
Double-Shell Slurry Feed (DSSF)	Waste concentrated just before reaching the sodium aluminate saturation boundary in the evaporator without exceeding receiver tank composition limits. This form is not as concentrated as DSS.
Drywell	A steel casing, generally 6 inches in diameter drilled into the ground to various depths, and used to insert monitoring instruments for measuring the presence of radioactivity or moisture

content.

Drywell (in-tank)	A sealed casing within a tank that is attached to a riser. It is used to insert experimental equipment, such as neutron or acoustical probes, to determine the level of drainable interstitial liquor.
DSS	See Waste Abbreviations.
DSSF	See Waste Abbreviations.
DUMM	See Waste Abbreviations.
DUMMY	See Waste Abbreviations.
DW	See Waste Abbreviations.
DWBIX	See Waste Abbreviations.
E	Transaction flag key-waste transferred through evaporator.
EB	See Waste Abbreviations.
EDTA	Ethylenediaminetetraacetic acid.
EF	See Waste Abbreviations.
EFD	See Waste Abbreviations.
END	Disconnect Cascaded Tanks, see CAS, Set.
Environs	Surrounding area, vicinity.
EV	Evaporation.
EVAP	See Waste Abbreviations.
EVAPF	See Waste Abbreviations.
Evaporator Feed	Any waste liquid that can be concentrated to form saltcake; e.g., low heat waste, dilute interstitial liquor, aged waste, and other radioactive waste solutions.

Evaporator-Crystallizer	242-A and 242-S waste concentration facilities that operate at a reduced pressure (vacuum) and are capable of producing a slurry containing about 30 volume percent solids at a specific gravity of greater than 1.6.
EVS	Partial neutralization in the 242-S Evaporator.
EVT	HEDTA destruction in the 242-B or 242-T Evaporators.
FD	See Waste Abbreviations.
FECN	Ferrocyanide wastes created during a scavenging campaign in 1953-57. See SCAV, POO, TOO.
Ferrocyanide	An ion composed of iron and cyanide with the chemical formula of $\text{Fe}(\text{CN})_6^{-4}$.
FIC	A Food Instrument Corporation automatic liquid level gauge based on a conductivity probe. At Hanford, they are electrically connected to a computer for data transmission, analysis, and reporting. Local readings may also be obtained from a dial.
First- And Second-Cycle Decontamination Wastes	Waste contained 10 percent of the original fission product activity and 2 percent of the products. By-product cake solution was mixed with product waste and neutralized with 50 percent caustic. The waste contained a mixture of suspended solids, hydroxides, carbonate and phosphate, scavenger metals, chromium, iron, sodium, and silicofluoride.
FLSH	See Waste Abbreviations.
FP	Fission Product Waste. Waste produced at B Plant and Hot Semiworks in campaigns for Cs and Sr recovery during the 1960s. Cs was removed from PUREX supernatant and Sr was removed from

	PUREX sludge; both were removed from acidic waste.
FP	See Waste Abbreviations.
GA	Gain to tank.
Gamma Ray	Electromagnetic radiation sometimes emitted by the nuclei of radioactive substances during decay, similar in nature to X-rays.
GAS	Slurry growth as a result of gas generation.
GM Instrument	Instrument for detecting low-level beta and gamma radiation using a Geiger-Mueller tube.
GROUP	A group of tanks where ITS averaged the supernatant phases-see ITS.
Gunite	A building material consisting of a mixture of cement, sand, and water that is sprayed onto a mold.
H ₂ O	Water.
HDRL	See Waste Abbreviations.
HEAT	A tank correction, see CORR, COOL.
HEDTA	N hydroxy-ethylenediaminetriacetic acid.
Heel	The amount remaining in a vessel or container after most of the contents have been removed.
Hexone	Methyl isobutyl ketone, an organic solvent used in the REDOX solvent extraction process. Also known as Isobutyl methyl ketone, Methyl isobutyl ketone, 4-Methyl 2-pentanone, MIBK.
High-Level Waste	Waste from the fuel reprocessing operations in separations plants.
Historical Information	All information obtained from material

referenced in published documentation and unpublished sources. Unpublished sources include electronically retrieved data (i.e. temperatures, liquid observation well, sampling, and surface level) and photographs.

HLO	See Waste Abbreviations.
HLO	Hanford Laboratory Operations.
HLW	See Waste Abbreviations.
HOT-SEMI	See HS, SSW.
HS	See Waste Abbreviations.
HS	Hot Semi-Works. A pilot facility that had a variety of operations. C Plant.
HWVP	Dilute, non-complexed waste from the vitrification plant.
I&S	Tank isolated and stabilized.
Inactive Tank	A tank that has been removed from liquid-processing service, has been pumped to less than 33,000 gal of waste, and is waiting to be, or is in the process of being, stabilized and interim isolated. Includes all tanks not in active or active-restricted categories. Otherwise inactive contingency spares that would be used if an active tank failed are also included.
INST	Change in tank level due to change in instrumentation.
Interim Isolated	An administrative designation reflecting the completion of the physical effort required to minimize the addition of liquids into an inactive storage tank, process vault, sump, catch tank, or diversion box.
Interim Stabilized	A tank which contains less than 50,000 gallons of drainable interstitial liquid

and has less than 5,000 gallons of supernatant liquid. If the tank was jet pumped to achieve interim stabilization, then the jet pump flow must also have been at or below 0.05 gallons per minute before interim stabilization is completed.

Interstitial Liquor	The liquid that fills the interstices or the void volume in the solid material in a waste tank.
Interstitial	The volume within a solid matrix made up of the crevices, cracks, and void spaces.
Intrusion Mode FIC Setting	The FIC probe is positioned a short distance above the waste surface. If the surface level of the waste in the tank increases, thereby touching the probe tip, a positive indication is received.
Intrusion Prevention	This is an administrative designation reflecting the completion of the physical effort required to minimize the addition of liquid into an inactive storage tank, process vault, catch tank, sump, or diversion box.
ISO	Tank is interim-isolated.
ITS	The In-Tank Solidification Program was a program used to reduce waste volume directly by evaporating the wastes from inside certain tanks in the BX and BY Farms. The process used both hot air (ITS-1) and an electric heater (ITS-2).
IWW	See Waste Abbreviations.
IX	See Waste Abbreviations.
Jet Pump	A modified commercially available low capacity jet pump used as a salt well pump.
Knuckle	Point where the side wall and the bottom

	curved surface of a tank meet.
L222S	See Waste Abbreviations.
L3A4A	See Waste Abbreviations.
LaF	See Waste Abbreviations.
Lateral	Horizontal drywell under A Farm and certain SX Farm waste storage tanks.
Leak Detection Pit	Collection point for any leakage from AX Farm tanks. The pits are equipped with radiation and liquid detection instruments.
LEAK	Tank leak volume, see CORR.
LETF	Liquid effluent treatment facility from N-Reactor.
Level Adjustment	Any update in the waste inventory (or tank level) in a tank. The adjustments usually result from surveillance observations or historical investigations.
Level History	A diagram that shows the history of the waste level and waste level changes in a tank. The diagram also includes other related data.
Liquid Observation Well (LOW)	Liquid observation wells are used to monitor the interstitial liquid level (ILL) in single-shell waste storage tanks. Three probes are used to monitor changes in the ILL: acoustic, gamma, and neutron. Each method can indicate intrusions or leakage by increases or decreases in the ILL.
Liquid Level Best Engineering Judgement Line	During the initial fill of certain single-shell tanks, only the liquid level was reported. To adjust for the big increase in level height, which occurred when solids were added to the record, a sloped line was used to reflect solids volume between the

initial fill and the time the solids data was recorded.

LO	Loss from tank.
LUNC	See Waste Abbreviations.
LW	See Waste Abbreviations.
Metal Waste (MW)	Waste from the extraction containing all the uranium, approximately 90 percent of the original fission product activity, and approximately 1 percent of the product. This waste was brought just to the neutral point with 50 percent caustic and then treated with an excess of sodium carbonate. This procedure yielded almost completely soluble waste at a minimum total volume. The exact composition of the carbonate compounds was not known but was assumed to be an uranium phosphate carbonate mixture.
Molarity	Number of gram molecular weights (moles) per liter of solution.
Mole	The amount of a substance with weight equal to the molecular weight in grams.
MW	See Waste Abbreviations.
MWF	See Waste Abbreviations.
N	See Waste Abbreviations.
NCAW	See Waste Abbreviations.
NCPL	See Waste Abbreviations.
NCPLEX	See Waste Abbreviations.
NCPLX	See Waste Abbreviations.
NCRW	See Waste Abbreviations.
Neutralized PUREX Acid Waste	The original plant in 1956 neutralized all the high-level waste and sent it to the 241-A Tank Farm. As fission product

recovery started, a portion of the waste was treated for strontium recovery and then neutralized. As of 1967, all of the high-level waste left PUREX as an acid solution for treatment at B Plant.

Neutron Probe	Probe equipped with a neutron source and detector. They are used in dry well monitoring to determine the moisture content of the soil as one means for detecting leaks in underground waste storage tanks or pipelines.
NFAW	See Waste Abbreviations.
NHAW	See Waste Abbreviations.
NIT	HNO ₃ /KMNO ₄ solution added during evaporator operation.
Noise At The Bottom Of Well--Drywell Probe	Erroneous reading caused by probe coming contact with foreign objects at the bottom of a well.
Non-Complexed (NCPLX)	General waste term applied to all Hanford Site liquors not identified as complexed (containing organics).
NPH	Normal paraffin hydrocarbon.
NRAW	See Waste Abbreviations.
NRP82	See Waste Abbreviations.
NRPO4	See Waste Abbreviations.
NRSO4	See Waste Abbreviations.
NTA	Nitrilotriacetic acid.
Nuclear reactor	A device for creating a controlled nuclear chain reaction using atomic fuel, as for the production of energy.
Open Hole Salt Well	A well in which a pump is inserted in solid waste. Frequently used to remove the liquid from tanks containing less than 2 feet of sludge.

Organic Wash Waste(OWW)	The solvent used in PUREX was treated before reuse by washing with potassium permanganate and sodium carbonate, followed by dilute nitric acid and then a sodium carbonate wash.
Out-of-Service-Tank	A tank that does not meet the definition of an in-service tank. Before September 1988, these tanks were defined as inactive. {Note: all single-shell tanks (SSTs) are out of service.}
OWW	See Waste Abbreviations.
P	See Waste Abbreviations.
P1:	See LANL Defined Waste List.
P2:	See LANL Defined Waste List.
PADFG	See Waste Abbreviations.
PADWG	See Waste Abbreviations.
Partially Interim Isolated	The administrative designation reflecting the completion of the physical effort required for Interim Isolation except for the isolation of risers and piping that will be required for jet pumping or for other methods of stabilization.
PAS	See Waste Abbreviations.
PASF	See Waste Abbreviations.
PAW	See Waste Abbreviations.
PD	See Waste Abbreviations.
PDBNG	See Waste Abbreviations.
PDBSU	See Waste Abbreviations.
PDBTG	See Waste Abbreviations.
PDCSS	See Waste Abbreviations.

PDL87	See Waste Abbreviations.
PDL89	See Waste Abbreviation.
PDNSG	See Waste Abbreviations.
PDS87	See Waste Abbreviations.
PDS89	See Waste Abbreviations.
PDSL _G	See Waste Abbreviations.
PDSUP	See Waste Abbreviations.
PFeCN	See Waste Abbreviations.
PFeCN1:	See LANL Defined Waste List.
PFeCN2:	See LANL Defined Waste List.
PFMMS	See Waste Abbreviations.
PFP (Z-Plant)	See facilities.
PFP	Plutonium finishing plant waste (see Z, 224, PRF).
PFPGR	See Waste Abbreviations.
PFPNT	See Waste Abbreviations.
PFPPT	See Waste Abbreviations.
PFPSL	See Waste Abbreviations.
pH	A measure of the hydrogen ion concentration in a solution.
Pile	An early term used to describe a nuclear reactor.
PL	See Waste Abbreviations.
PML89	See Waste Abbreviations.
PMS89	See Waste Abbreviations.
PN	See Waste Abbreviations.

PNF	See Waste Abbreviations.
POO-P##	In-Plant scavenging with FeCN-see SCAV, TOO-T##.
Portland Cement	A hydraulic cement made by finely pulverizing the clinker produced by calcining to incipient fusion a mixture of clay and limestone or similar materials.
PRF	Plutonium Reclamation Facility-Type of waste generated in Z-Plant for "finishing wastes". Solvent based extraction process using CCl ₄ /TBP.
Primary Addition	An addition of waste from a specific plant or process vault. These additions come from the "waste Status and Transaction Record Summary", WHC-SD-WM-TI-614 & -615 Rev. 0 DRAFT.
Primary Stabilization	The condition of an inactive waste storage tank after all liquid above the solids, other than isolated surface pockets, has been removed. Isolated surface pockets of liquid are those not pumpable by conventional techniques.
Probe	A device used to get information about the environment. In this report, an instrument package designed to be inserted in drywells, risers, or ports to measure waste characteristics.
PSL	See Waste Abbreviations.
PSS	See Waste Abbreviations.
PSSF	See Waste Abbreviations.
Psychrometry	Determination of humidity or dew point from wet and dry bulb temperatures with the difference in the two used as a measure of dryness in the atmosphere.
PT	See Waste Abbreviations.

PUREX	See Facilities.
PX86S	See Waste Abbreviations.
PXBAW	See Waste Abbreviations.
PXBSG	See Waste Abbreviations.
PXFTF	See Waste Abbreviations.
PXLOW	See Waste Abbreviations.
PXMET	See Waste Abbreviations.
PXMSC	See Waste Abbreviations.
PXNAW	See Waste Abbreviations.
Questionable Integrity	Any tank that has a small decrease in liquid level or a radiation increase in an associated dry well, for which the data are insufficient to support a conclusion with 95 percent confidence that the tank is sound.
R	See Waste Abbreviations.
R SLTCK:	See LANL Defined Waste List.
R1:	See LANL Defined Waste List.
R2:	See LANL Defined Waste List.
Radiation Zone	An area containing radioactive materials in quantities significant enough to require control of personnel entry to the area.
Radiation	Particles and electromagnetic energy emitted by nuclear transformations that are capable of producing ions when interacting with matter.
Readily available have Risers	Risers located above grade which do not apparatus attached to or contained in them.

REC	Receive waste from another tank-see XFER.
REDOX	See Facilities.
Removed From Service is not (Tanks)	Any tank that is a confirmed leaker or intended for reuse.
Rerun Drywell Data	Surveillance data which supersedes "suspect data".
RESO	See Waste Abbreviations.
RIX	See Waste Abbreviations.
RMC	Remote Mechanical C-Line -Process used in Z-Plant.
RSN	See Waste Abbreviations.
RSS	See Waste Abbreviations.
RTX	See Waste Abbreviations.
S	Transaction Flag Key-Partial neutralization (PNF).
S-Plant (REDOX)	See Facilities.
S1 SLTCK:	See LANL Defined Waste List.
S2 SLTSLRY:	See LANL Defined Waste List.
Salt Cake	Crystallized nitrate and other salts deposited in waste tanks, usually after active measures are taken to remove moisture.
Salt Well	A hole drilled or sluiced into a salt cake and lined with a cylindrical screen to permit drainage and jet pumping of interstitial liquors.
SCAV	Scavenging campaign with FECN on TBP, 1952-57. See TOO-T##, POO-P##.
Scavenged	Waste which has been treated with ferrocyanide to remove cesium from the

	supernatant by precipitating it into the sludge.
Scintillation Monitor	A radiation detection instrument based on the principle that light pulses are produced in some materials when they are exposed to radiation.
Self Concentrating	High-level liquid radioactive waste whose constituent radionuclides contribute sufficient decay heat to cause the solution to boil and/or self-concentrate.
Self-Evaporation	A waste material in which moisture is being lost as the moisture changes to a vapor and diffuses into the atmosphere.
SET	Connect cascaded tanks together-see CAS and END.
SIX	See Waste Abbreviations.
SL	See Waste Abbreviations.
SL3SY	See Waste Abbreviations.
Sludge	Primarily insoluble metal hydroxides and oxides precipitated from neutralized waste.
Slugs	An early term for uranium fuel elements which had been machined or extruded into short cylinders which were then clad or encased in corrosion-resistant metals.
Sluicing, or sluiced	To wash with water. At Hanford, this has meant to dissolve or suspend in solution by action of a high pressure water stream.
Slurry	Insoluble material suspended in water or aqueous solution.
Sound Tank	The classification of a waste storage tank for which surveillance data indicates there has been no loss of liquid attributed to a breach of

integrity.

SPRG	Sparge-transfer of water or volume
SRR	See Waste Abbreviations.
SRS	See Waste Abbreviations.
SRS	See Waste Abbreviations.
SSW	See Waste Abbreviations.
STAB	Tank stabilized by removal of liquid. Both floating suction and salt-well jet pumps used to remove liquid.
Stabilization	The removal, or immobilization, as completely as possible, of the liquid contained in a radioactive waste storage tank by salt well pumping, open hole salt well pumping, diatomaceous earth addition, etc.
Static Tank	A tank with no significant change in liquid level or involvement in transfer operations during a stated period of time.
Strontium Semi-Works	Called C-Plant or Hot Semi-Works, was a pilot plant for both Redox and Purex, then reconfigured for strontium recovery.
SU	See Waste Abbreviations.
Supernatant (Supernatant Liquid)	In waste storage tanks, the liquid quantity defined by the difference between the measured liquid level and the measured average solids level in a tank.
Surveillance	Regular or systematic watch kept over someone or something.
Suspect Data	Surveillance data which does not fall within the expected range and is superseded by "reruns."

SV	Transaction Flag Key-Amount by difference in solids.
SW RCR	Salt-well Receiver.
SWLIQ	See Waste Abbreviations.
SWLQW	See Waste Abbreviation.
T-Plant (222-T)	See Facilities.
T1 SLTCK:	See LANL Defined Waste List.
T2 SLTCK:	See LANL Defined Waste List.
Tank Farm	An area containing a number of storage tanks; i.e., a chemical tank farm for storage of chemicals used in a plant, or underground waste tank storage of radioactive waste.
TBP	Tributyl phosphate, a solvent used in the PUREX solvent extraction process.
TBP	See Waste Abbreviations.
TCO	See Waste Abbreviations.
Terminal Liquor	The liquid product from the evaporation-crystallization process which, upon further concentration, forms an unacceptable solid for storage in single-shell tanks. Terminal liquor is characterized by a caustic concentration of approximately 5.5 M (the caustic molarity will be lower if the aluminum salt saturation is reached first).
TFeCN	See Waste Abbreviations.
TH	See Waste Abbreviations.
Thermocouple Tree	A group of thermocouples assembled in a pipe and inserted into a waste tank for measuring temperatures at regular (normally 2 feet) vertical intervals.
Thermocouple,	A probe for measuring temperature,

Thermocouple probe	consisting of two dissimilar metal wires joined at one end (hot junction) with the free ends joined to a measuring instrument. Electrical potential changes due to temperature changes at the hot end are measured and calibrated to read out as temperature.
Thermowell	A well in a waste tank which contains thermocouples.
THL	See Waste Abbreviations.
Thorium	A chemical element which is also a fertile material. By fertile is meant that when subjected to radiation in a nuclear reactor it will be converted, in this case, to ²³³ uranium, a potential fuel.
TK	Tank. TK-17-2, however, was an early designation for B-Plant.
TL	See Waste Abbreviations.
TOO-T##	In-Tank scavenging with FECN, see SCAV, P##.
TPLAL	See Waste Abbreviations.
TPLAN	See Waste Abbreviations.
TPLAS	See Waste Abbreviations.
TR	Transfer from tank.
Trench	A deep furrow in the ground. At Hanford they are used for the disposal of solid waste.
trFlag	Transaction Flag Keys-used by W-Trac-see CDF, D, E, S, SV, 1, 3, 6, 0.17, 0.33.
Tributyl Phosphate (TBP)	A chemical compound, also an organic solvent used in the PUREX solvent extraction process.

Type I Tank	These are the 200 series B, C, T, and U Farm tanks. They have an operating capacity of 55,000 gal, a 20-ft diameter, a 6-in. dish bottom, and a 3-ft knuckle. There is no generation associated with type I tanks.
Type II Tank	These are the original, 1st generation, tank designs, encompassing B, C, T, U (excluding the 200 series tanks), and BX Tank Farms. Also see 1st Generation Tank.
Type III Tank	These are the 2nd Generation tank designs, encompassing BY, S, TX, and TY Tank Farms. Also see 2nd Generation Tank.
Type IV Tank	These include 3rd, 4th, and 5th generation tank designs, encompassing SX, A, and AX Tank Farms respectively. Also see 3rd Generation Tank, 4th Generation Tank, and 5th Generation Tank.
Type V Tank	These are the first double shell tank designs, encompassing AY, AZ, and SY Tank Farms.
U-Plant (222-U)	See Facilities.
U1U2	See Waste Abbreviations.
UNKN	Unknown waste origin sink.
UNKNOWN:	See LANL Defined Waste List.
UR	Uranium recovery operation in 222-U, 1952-57. Created TBP (primary waste) and FECN (scavenging wastes). See TFeCN, PFeCN, POO, TOO, FeCN.
UR:	See LANL Defined Waste List.
Watch List Tank	An underground storage tank containing waste that requires special safety precautions because it may have a serious potential for release of high-level radioactive waste because of

uncontrolled increases in temperature or pressure. Special restrictions have been placed on these tanks by "Safety Measures for Waste Tanks at Hanford Nuclear Reservation," Section 3137 of the National Defense Authorization Act for Fiscal Year 1991, November 5, 1990, Public Law 101-501 (also known as the Wyden Amendment).

WATER	Flush water from various sources.
WTR	Water.
WVP	Waste volume projections
XFER	Transfer of waste out of tank.
Z	See Waste Abbreviations
Z-Plant	See Facilities
Z-PLANT	FPF. Plutonium Finishing Plant.
ZAW	See Waste Abbreviations.
ZHIGH	See Waste Abbreviations.
ZLAB	See Waste Abbreviations.
ZLOW	See Waste Abbreviations.
ZPRFL	See Waste Abbreviations.
ZPRFS	See Waste Abbreviations.
ZRM	See Waste Abbreviations.
ZRMCL	See Waste Abbreviations.
ZRMCS	See Waste Abbreviations.

WASTE ABBREVIATIONS

1AYIN	Concentrated complex waste from 101 AY inventory
1AZIN	Pre 2-81 101AZ inventory
1C	First cycle waste
1CEB	1st cycle evaporator bottoms
1CS	1st cycle scavenging waste
224	224-U waste
224-F	224-U waste. LaF Pu finishing plant
231Z	Dilute, phosphate waste from 231Z laboratories
2AYIN	Pre 2-81 102AY inventory
2AZIN	Pre 2-81 concentrated complex waste from 102AZ inventory
2C	Second cycle waste
2SYIN	Pre 2-81 102SY inventory
3AWIN	Pre 2-81 103AW inventory
5-6	B-Plant tank 5,6 waste
5AWIN	Pre 2-81 105AW inventory
6AWIN	Concentrated phosphate waste in 106AW inventory
AGE, AGING	Aging waste
B	B-Plant high- level waste
B860N	Dilute, non-complexed waste from B Plant cell drainage
BFSH	B-Plant flush waste water
BL	B-Plant low-level waste

BLEB	B-Plant low-level evaporator bottoms
BLIX	B-Plant low level ion exchange?
BLIXB	B-Plant low level ion exchange bottoms?
BNW	Battelle Northwest Laboratory waste
BPDCS	Dilute, complexed waste from B Plant cesium processing
BPDCS	Dilute, complexed waste from B Plant strontium processing
BPDCV	Dilute, complexed waste from B Plant vessel clean-out
BPFPS	B Plant high Tru solids from retrieved PFP solids
BPLCS	Dilute, non-complexed waste from B Plant strontium processing
BPLDC	Dilute, complexed waste from B Plant cesium processing
BPLDN	Dilute, non-complexed waste from B Plant cesium processing
BVCLN	Dilute, non-complexed waste from B Plant vessel clean-out
CARB	PUREX organic wash waste
CC	Complexant concentrate waste
CCGL	B-Plant high Tru solids from retrieved complexed concentrate
CCGR	Dilute, non-complexed waste from retrieved complexed concentrate
CCPL	Complexant concentrate
CCPLX	Complexant concentrate-see CPLX

CE	Evaporator concentrate
CEM	Concrete-see CON
CF	Cesium feed
CON	Concrete-see CEM
CP	Concentrated phosphate waste from N Reactor decontamination
CPLX	Complex waste
CSFD	Cesium feed
CSR	Waste sent to B-Plant for cesium recovery
CST	Caustic solution
CSWLE	Complexed salt well liquid east area
CSWLW	Complexed salt well liquid west area
CW	Coating waste
CWP/ZR	Coating waste (PUREX), Zirconium cladding
CWP	Coating waste (PUREX)
CWR	Coating waste (REDOX)
CX70	Dilute, complexed mixture hot-semiworks Tru solids
DC	Dilute complexed waste
DN/PD	DN with P Tru solids
DN	Dilute non-complexed waste
DN/PT	DN with PFP Tru solids
DSS	Double-shell slurry
DSSF	Double-shell slurry feed

DUMM	Dummy waste
DUMMY	Dummy waste
DW	Decontamination waste
DWBIX	Decontamination waste and B-Plant ion exchange
EB	Evaporator bottoms
EF	Evaporator feed
EFD	Evaporator feed dilute
EVAP	Evaporator feed (post 1976)
EVAPF	Dilute, non-complexed waste from evaporator pad flush
FD	Feed dilute
FLSH	Flush water
FP	Fission product waste
HDRL	Hanford defense residual liquor
HLO	Hanford laboratory operations waste
HLW	High level waste-generic for all Hanford tank wastes
HS	Hot semiworks waste
IWW	PUREX #1 acid concentrator waste
IX	Ion exchange waste
L222S	222S laboratory, dilute non-complexed waste
L3A4A	Dilute non-complexed laboratory wastes from 300 & 400 areas
LaF	Lanthanum fluoride waste generated in PFP

LUNC	Dilute, non-complexed waste from UNC fuels fabrication
LW	Laboratory waste
MW	Metal waste
MWF	Metal waste feed
N	N-Reactor waste
NCAW	Neutralized current acid waste, primary HLW stream from PUREX process
NCPLEX	Non-complexed waste-see NCPLX
NCPLX	Non-complexed waste-see NCPLEX
NCPL	Non-Complexed waste
NCRW	Neutralized cladding removal waste-same as CWP.
NFAW	Aging waste from PUREX/PFM high level waste
NHAW	Aging waste from PUREX/PFM processing of NPR fuel
NRAW	Aging waste from PUREX/PFM residue acid waste
NRP82	Dilute, non-complexed waste from FY82 100-N area waste transfer
NRPO4	Dilute, phosphate waste from 100N area
NRSO4	Dilute, non-complexed waste from 100N area
OWW	Organic wash waste
P	PUREX waste
PADFG	Purex ammonia destruction waste, from fuels grade fuel
PADWG	Purex ammonia destruction waste, from

	weapons grade fuel
PAS	Purex acidified sludge
PASF	Purex ammonia scrubber feed
PAW	Purex acidified waste
PD	Purex decladding waste
PDBNG	Decladding sludge (non-Tru) from B Plant processing
PDBSU	Dilute, non-complexed waste from B Plant decladding waste
PDBTG	B Plant aging waste solids from Purex decladding waste
PDCSS	Dilute non-complexed Purex decladding waste, FY1986 only
PDL87	Purex decladding supernatant, 1987
PDL89	Purex decladding supernatant, non-Tru, spent metathesis removed
PDNSG	Non-Tru decladding sludge from Purex
PDS87	Purex decladding sludge
PDS89	Purex decladding sludge after FY89
PDSLGL	Purex decladding sludge sol Purex
PDSUP	Dilute, non-complexed waste, Purex decladding waste
PFeCN	Ferrocyanide sludge produced by in-plant scavenging of waste from uranium recovery
PFMMS	Dilute, non-complexed waste from shear/leach processing of NPR fuel
PFPGR	Dilute, non-complexed waste from retrieved PFP solids

PFPNT	Non-tru sludge from the PFP sol Z Plant
PFPPT	Dilute, non-complexed waste from the PFP (with TRUEX)
PFPSL	High-tru sludge from the PFP sol Z Plant
PL	PUREX low-level waste
PML89	Purex spent metathesis liquid after FY89
PMS89	Purex spent metathesis solids after FY89
PN	Purex neutralized cladding waste
PNF	Partial neutralized waste
PSL	Purex sludge sluiced during recovery of strontium
PSS	PUREX sludge supernatant
PSSF	Purex sludge supernatant feed
PT	Tru solids from 200W
PX86S	Dilute, non-complexed waste from Purex miscellaneous streams (NPR fuel) FY86
PXBAW	B Plant aging waste supernatant from retrieved aging waste
PXBSG	B Plant aging waste solids from retrieved aging waste
PXFTF	Dilute, non-complexed waste from Purex miscellaneous streams (FFTF)
PXLOW	Purex low level waste
PXMET	Purex dilute, non-complexed decladding: spent metathesis
PXMSC	Dilute, non-complexed waste from Purex miscellaneous streams (NPR fuel)
PXNAW	Aging waste from Purex high level waste

R	REDOX waste
RES	Residual evaporator liquor
RIX	REDOX ion exchange waste
RSN	REDOX supernatant
RSS	Redox sludge supernatant
RTX	Redox ion exchange
SIX	PUREX ion exchange waste
SL	Sludge
SL3SY	Double shell slurry from end of FY80, 103SY inventory
SRR	Waste sent to B-Plant for strontium recovery
SRS	Strontium sludge
SRS	Strontium recovery supernatant
SSW	Strontium semiworks waste
SU	Supernatant
SWLIQ	Dilute, non-complexed waste from east area single shell tanks
SWLQW	Dilute, non-complexed waste from west area single shell tanks
TBP	Tri-Butyl Phosphate
TCO	Dilute non-complexed waste from terminal cleanout
TFeCN	Ferrocyanide sludge produced by in-tank or in-farm scavenging
TH	Thoria HLW or cladding waste
THL	Thoria low level waste

TL	Terminal liquor
TPLAL	Dilute, non-complexed waste from T Plant
TPLAN	Dilute, non-complexed waste from T Plant
TPLAS	Sludge from T Plant operations
U1U2	Dilute, non-complexed waste from U1/U2 groundwater pumping
Z	Z-Plant waste
ZAW	Purex waste stream from zirconium clad fuel
ZHIGH	Dilute, non-complexed waste from the PFP (without Truex)
ZLAB	Dilute, non-complexed waste from the PFP laboratories
ZLOW	Dilute, non-complexed waste from Pre-FY85 Z Plant operations
ZPRFL	Dilute, non-complexed waste from PRF processing
ZPRFS	PFP Tru solids from PRF processing
ZRMCL	Dilute, non-complexed waste from PFP RMC processing
ZRMCS	PFP Tru solids from PFP RMC processing

A. LANL Defined Wastes

LANL DEFINED WASTE LIST

A1 SLTCK	Saltcake waste generated from the 242-A evaporator-crystallizer from 1977 until 1980.
A2 SLTSLRY	Salt slurry waste generated from the 242-A evaporator-crystallizer from 1981 until 1994.
AR	"Washed" PUREX sludge from the AR vault.
B SLTCK	Saltcake waste generated from the 242-B evaporator from 1951 until 1955.
BY SLTCK	Saltcake waste generated from in-tank solidification units 1 and 2 between 1965 and 1974.
CWP2	Cladding waste-PUREX 2???
DE	Diatomaceous earth.
P1	PUREX high-level waste generated between 1955 and 1962.
P2	PUREX high-level waste generated between 1963 and 1967.
PFeCN1	Ferrocyanide sludge generated from in-plant scavenging of waste from uranium recovery.
PFeCN2	Same as PFeCN1, except used 0.0025 M ferrocyanide.
R SLTCK	Salt cake waste from the REDOX concentrator.
R1	REDOX waste generated between 1952 and 1957.
R2	REDOX waste generated between 1958 and 1966.

S1 SLTCK	Saltcake waste generated from the 242-S evaporator/crystallizer from 1973 until 1976.
S2 SLTSLRY	Salt slurry waste generated from the 242-S evaporator-crystallizer from 1977 until 1980.
T1 SLTCK	Saltcake waste generated from the 242-T evaporator from 1951 until 1955.
T2 SLTCK	Saltcake waste generated from the 242-T evaporator from 1965 until 1955.
UNKNOWN	Unkown waste type.
UR	Uranium recovery waste (also known as tributyl phosphate (TBP) waste).

FACILITIES

A Plant (PUREX)	The facility at Hanford which contains the latest solvent extraction process for recovery of both plutonium and uranium.
B Plant (222-B)	On of the three original bismuth-phosphate processing facilities. Later converted to a waste fractionation plant.
C Plant (222-C)	Initially a pilot plant for Redox, later a pilot plant for Purex and B-Plant waste partitioning.
S Plant (REDOX)	The facility at Hanford which contains the original extraction process for recovery of both plutonium and uranium.
T Plant (222-T)	One of the three original bismuth-phosphate processing facilities. Later converted to a decontamination facility.
U Plant (222-U)	One of the three original bismuth-phosphate processing facilities. Later converted to a uranium recovery plant.
PFP (Z Plant)	Plutonium Finishing Plant. The final operations for production of plutonium products are carried out in this facility.
242-A	A forced circulation vacuum evaporation system.
242-B	An evaporator that operates at atmospheric pressure. Also referred to as an open air type evaporator.
242-S	A forced circulation vacuum evaporation system.
242-T	An evaporator that operates at atmospheric pressure. Also referred to as an open air type evaporator.

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ANDERSON 1990	MW	TBP	TBP	BL	RIX	NCPX
WASTE TYPES				OWW	EB	EVAP
				CW	SIX	DSSR
				TWW	IX	CPLX
PRIMARY ADDITIONS	MW	WTR		BS/SLICK		
				CSR		

NOTE:
RECEIVED AN INADVERTANT
TRANSFER OF ARC-359 ORGANIC
ION-EXCHANGE RESIN IN 1972.
(1,800 GAL OR 7m³)

NOTES:
CONSTRUCTED 1948-1949
NOMINAL CAPACITY 130,000 GAL
21500 DRAINER TANK
SURFACE LEVEL READING: PHOTO
(LIQUIDS), MANUAL TAPE (SOLIDS)
WHC REPORT WHC-EP-0137 SUPPLEMENT
WHC REPORT WHC-MR-0132
WHC REPORT SD-WN-11-356
RHO-CD-0014 (MONTHLY)
DWG. W-71387
DWG. H-2-502
DWG. HW-72743
BL: B-PLANT LOW-LEVEL WASTE
EB: EVAPORATOR BOTTOMS
CPLX: COMPLEX WASTE
CW: PUREX COATING WASTE
DSSR: DOUBLE-SHELL SLURRY FEED
IX: ION EXCHANGE WASTE
EVAP: EVAPORATOR FEED
OWW: ORGANIC WASH WASTE
TWW: PUREX #1 ACID CONDENSATOR WASTE
RHX: REDUX ION EXCHANGE WASTE
IB: ION-BED WASTE
MX: PUREX ION EXCHANGE WASTE
SIX: NON-COMPLEXED WASTE
WTR: WASTE WATER
BS/SLICK: IN-TANK SOLIDIFICATION SALTCAKE
CSR: CESIUM RECOVERY WASTE

LEGEND
LIQUID OBSERVATION
WELL (LOW)
LIQUID LEVEL
SOLIDS LEVEL
BEST
ENGINEERING JUDGEMENT

U.S. DEPARTMENT OF ENERGY
RICHMOND FIELD OFFICE
ICE KAISER HANFORD

241-BX-101 SINGLE-SHELL TANK
LEVEL HISTORY 1948 TO 1993
ASSUMED LEAKER/STABILIZED TANK
WATCH LIST: N/A

DATE: 6/94
BY: ES-TKS-E27
NOTE: 1 of 1

ANDERSON 1990	MW:	TBP:	CW:	EB:	NCPLX:
WASTE TYPES					

PRIMARY
ADDITIONS

NONE

NOTES:

CONSTRUCTED 1946-1947
NOMINAL CAPACITY 50,000 GAL
DISH BOTTOM, 1 FOOT RADIUS KNUCKLE
3 FOOT DIAMETER TANK
SURFACE LEVEL READING: PHOTO
(LIQUID), MANUAL TAPE (SOLIDS)
WHC REPORT WHC-EP-0147 SUPPLEMENT
WHC REPORT WHC-EP-0132 (MONTHLY)
WHC REPORT WHC-EP-0133 (MONTHLY)
WHC REPORT SD-WM-TI-356
RHO-CD-0014 (MONTHLY)
DWG. W-71387
DWG. H-2-502
DWG. HW-72743
MW: METAL WASTE
EB: EVAPORATOR BOTTOMS
CW: PUREX COATING WASTE
OWW: ORGANIC WASH WASTE
BL: B-PLANT LOW-LEVEL WASTE
TBP: TRI-BUTYL PHOSPHATE
NCPLX: NON-COMPLEXED WASTE

LEGEND
LIQUID OBSERVATION
WELL (LOW)
LIQUID LEVEL
SOLIDS LEVEL
SOLIDS LEVEL BEST
ENGINEERING JUDGEMENT

U.S. DEPARTMENT OF ENERGY			
RICHLAND FIELD OFFICE			
ICF KAISER HANFORD			
241-BX-102 SINGLE-SHELL TANK			
LEVEL HISTORY 1948 TO 1993			
ASSUMED LEAKER/STABILIZED TANK			
WATCH LIST: FERROCYANIDE			
SIU	WDC	DOC	DATE
B	241	ES-TKS-E28	6/94
DATE	FILE NO	FILE	1

NOTES: CONSTRUCTED 1946-1947
NOMINAL CAPACITY, 530,000 GAL
DISH BOTTOM, 4 FOOT RADIUS KNUCKLE
75 FOOT DIAMETER TANK
SURFACE LEVEL READING PHOTO
(LITHIUMS). FIC (SOLIDS)
WHC REPORT WHC-EP-0347 SUPPLEMENT
WHC REPORT WHC-EP-0193 (NONMETHYL)
WHC REPORT WHC-EP-0192 (NONMETHYL)
WHC REPORT WHC-EP-0191 (NONMETHYL)
RHO-CD-0014 (NONMETHYL)
RHO-CD-0014 (NONMETHYL)

BI:	B-PLANT LOW-LEVEL WASTE
BNW:	BATTILLE PACTIFIC NW LAB WASTE
EB:	EVAPORATOR BOTTOMS
CW:	PUREX COATING WASTE
IX:	ION EXCHANGE WASTE
EF:	EVAPORATOR FEED
OWW:	ORGANIC WASTE
OW:	ORGANIC WASTE CONCENTRATOR WASTE
RTW:	REDOX ION EXCHANGE WASTE
TBP:	TRIBUTYL PHOSPHATE
MW:	METAL WASTE
SIX:	PUREX ION EXCHANGE
PL:	PUREX LOW-LEVEL WASTE
N:	N-REACTOR WASTE
OW:	DECONTAMINATION WASTE
W:	PUREX HIGH-LEVEL WASTE
LP:	LABORATORY WASTE
NCPX:	NON-COMPLETED WASTE
WTR:	WASTE WATER

LEGEND
LIQUID OBSERVATION
WELL (LOW)
LIQUID LEVEL
SOLIDS LEVEL
SOLIDS LEVEL BEST
ENGINEERING JUDGEMENT

U.S. DEPARTMENT OF ENERGY
RICHLAND FIELD OFFICE
ICF KAISER HANFORD

LEVEL HISTORY 1948 TO 1993
SOUND/STABILIZED TANK

SI: T	BLDC NO	0=6 NO	0
B	241	ES-TKS-E29	6.

NOTES:
CONSTRUCTED 1946-1947
NOMINAL CAPACITY 530,000 GAL
DISH BOTTOM, 4 FOOT RADIUS KNUCKLE
75 FOOT DIAMETER TANK
SURFACE LEVEL READING: FIC
(L10U105 & S01D5)
WHC REPORT WHC-EP-00347 SUPPLEMENT
WHC REPORT WHC-EP-0182-(MONTHLY)
WHC REPORT WHC-NR-0132
WHC REPORT SD-WM-TI-356
RHO-CD-00104-(MONTHLY)

DWG. W-71387
DWG. H-2-602
DWG. HW-72743

BL:	B-PLANT LOW-LEVEL WASTE
EB:	EVAPORATOR BOTTOMS
CW:	PURE COATING WASTE
IX:	ION EXCHANGE WASTE
EF:	EVAPORATOR FEED
NCPLX:	NON-COMPLETED WASTE
DSS:	DOUBLE-SHIELDED SLOTTED FEED
CPCL:	COMPLEX WASTE
IBP:	IRI-80 URANIUM PHOSPHATE
AM:	REDUCED WASTE
H ₂ O:	WATER
CWP:	CLADDING WASTE-PUREX
CSR:	CESIUM RECOVERY WASTE
BISTCK:	IN-TANK SODIFICATION
WRI:	SALT/CANE WASTE WATER

LEGEND

LIQUID LEVEL

/// SOLIDS LEVEL

~~111111~~ SOLIDS LEVEL BEST
ENGINEERING JUDGEMENT

BX TANK FARM

CASCADÉ

U.S. DEPARTMENT OF ENERGY
RICHMOND FIELD OFFICE

ICF KAISER HANFORD

241-BX-104 SINGLE-SHELL TANK
LEVEL HISTORY 1048 TO 1003

SOUND/STABILIZED TANK
LEVEL HISTORI 1948 10 13

WATCH LIST: N/A

241	B.C. MO	C.C. MO	ES-TKS-F30

	NO	SUBJECT	PAGE
NONE	-08 MO	SUBJECT 1 OF 1	

NOTES:
CONSTRUCTED 1946-1947
NOMINAL CAPACITY: 530,000 GAL
DISH BOTTOM, 4 FOOT RADIUS KNUCKLE
75 FOOT DIAMETER TANK
SURFACE LEVEL READING PHOTO (1100DS)
& SOLIDS, MANUAL TAPE (1100DS)
WHC REPORT WHC-EP-0347 SUPPLEMENT
WHC REPORT WHC-EP-0182 (NONHCL)
WHC REPORT WHC-AR-0132
WHC REPORT SD-NHCL-1-536
PHO-CD-0014 (NONHCL)

DATE	6/9/	ES-TKS-E33	241	B	FILE
JOB NO			NONE	SCALE	

U.S. DEPARTMENT OF ENERGY	
RICHLAND FIELD OFFICE	
ICF KAISER HANFORD	
241-BX-110 SINGLE-SHELL TANK	
LEVEL HISTORY 1948 TO 1993	
ASSUMED LEAKER/STABILIZED TANK	
WATCH LIST: N/A	
ES-TKS-E36	6/94
B	241
SCALE	NONE
JOB NO.	NONE
DATE	6/94

LEGEND

LIQUID OBSERVATION
WELL (LOW)
LIQUID LEVEL
SOLIDS LEVEL
SOLIDS LEVEL BEST
ENGINEERING JUDGEMENT

NOTES:

CONSTRUCTED 1946-1947
NOMINAL CAPACITY: 530,000 GAL
DISH BOTTOM, 4 FOOT RADIUS KNUCKLE
75 FOOT DIAMETER TANK
SURFACE LEVEL READING: MANUAL TAPE & PHOTO EVALUATION (LIQUIDS), MANUAL TAPE (SOLIDS)

WHC REPORT WHC-EP-0347 SUPPLEMENT
WHC REPORT WHC-MR-0132
WHC REPORT SD-WM-11-356
RHO-CD-0014-(MONTHLY)

DWG. W-71387
DWG. H-2-602
DWG. HW-72743

IC: FIRST CYCLE WASTE
EB: EVAPORATOR BOTTOMS
CW: PUREX COATING WASTE
IX: ION EXCHANGE WASTE
NCPX: NON-COMPLEXED WASTE
WTR: WASTE WATER
CSR: CESIUM RECOVERY WASTE

ANDERSON 1990
WASTE TYPES
PRIMARY
ADDITIONS

1C.	1C. EB	CW.	CW: 1x	EB. NCPX

PRIMARY ADDITIONS

NOTES:
CONSTRUCTED 1945-1947
NOMINAL CAPACITY: 530,000 GAL
21ST FOOT DIAMETER KNUCKLE
7.5 FOOT DIAMETER TANK
SURFACE READING: MANUAL TAPE
(SOLIDS & LIQUIDS)

WHC REPORT WHC-EP-0347 SUPPLEMENT
WHC REPORT WHC-EP-0182-(MONTHLY)
WHC REPORT WHC-MR-0132
WHC REPORT SD-WM-IT-356

DWG. W-71387
 DWG. H-2-602
 DWG. HW-72743
 CN: PHREX COATING WASTE
 EB: EVAPORATOR BOTTOMS
 EF: EVAPORATOR FEED
 IX: ION EXCHANGE WASTE
 IC: FIRST CYCLE WASTE
 NCPLX: NON-COMPLEXED WASTE

LEGEND

□-□-□	LIQUID OBSERVATION
—	WELL (LOW)
—	LIQUID LEVEL
///	SOLIDS LEVEL
	SOLIDS LEVEL BEST ENGINEERING JUDGEMENT

U.S. DEPARTMENT OF ENERGY
RICHLAND FIELD OFFICE
ICE KAISER HANFORD

241-BX-111 SINGLE-SHELL TANK
LEVEL HISTORY 1948 TO 1993
ASSUMED LEAKER/NON-STABILIZED
WATCH LIST: N/A

WATCH LIST: N/A

3127	MO	MO	ES-TKS-E37	6/94
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PHONE	MO	MO	1	1

DATE	DOC NO	241	ES-TKS-E38	6/94

241-BX-101 SINGLE-SHELL
TANK LEVEL HISTORY

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Total (in)
1-1948	303	106		
2	523	186		
3	523	186		
4	523	186		
1-1949	523	186		
2	523	186		
3	523	186		
4	523	186		
1-1950	523	186		
2	523	186		
3	523	186		
4	523	186		
1-1951	523	186		
2	523	186		
3				
4				
1-1952				
2	530	188		
3	530	188		
4	530	188		
1-1953	530	188		
2	211	72		
3	165	55	165	55
4	200	68	150	50
1-1954	90	28	90	28
2	0	-12		
3	0	-12		
4	0	-12		
1-1955	0	-12		
2	0	-12		
3	0	-12		
4	0	-12		
1-1956	0	-12		
2	0	-12		
3	524	186		
4	34	8		
1-1957	114	37		
2	114	37		
3	114	37		
4	120	39		
1-1958	123	40		
2	123	40		
3	125	41		
4	125	41		
1-1959	128	42		
2	130	43		

241-BX-101 SINGLE-SHELL
TANK LEVEL HISTORY

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Total (in)
3	130	43		
4	131	43		
1-1960	131	43		
2	131	43		
3	131	43		
4	131	43		
1-1961				
2	145	48		
3				
4	145	48		
1-1962				
2	546	194		
3				
4	552	196		
1-1963				
2	554	197	84	26
3				
4	554	197	84	26
1-1964				
2	554	197	84	26
3				
4	557	198	84	26
1-1965				
2	560	199	68	20
3	560	199	68	20
4	563	200	68	20
1-1966	563	200	68	20
2	563	200	68	20
3	563	200	68	20
4	563	200	68	20
1-1967	565	201	68	20
2	565	201	68	20
3	565	201	68	20
4	173	58	68	20
1-1968	246	85	68	20
2	348	122	59	17
3	150	50	59	17
4	200	68	57	16
1-1969	530	188	51	14
2	534	190	65	19
3	501	178	28	6
4	499	177	43	11
1-1970	114	37	48	13
2	290	101	62	18
3	249	86	46	12
4	360	126	46	12

241-BX-101 SINGLE-SHELL
TANK LEVEL HISTORY

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Total (in)
1-1971	213	73	51	14
2	466	165	51	14
3	143	47	51	14
4	245	85	57	16
1-1972	337	118	57	16
2	531	189	57	16
3	475	168	29	6
4	146	49	29	6
1-1973	142	47	29	6
2	149	50	29	6
3	151	50	29	6
4	157	53	46	12
1-1974	160	54	46	12
2	46	12	46	12
3	46	12	46	12
4	46	12	43	11
1-1975	46	12	43	11
2	46	12	43	11
3	46	12	43	11
4	46	12	43	11
1-1976	46	12	43	11
2	46	12	46	12
3	46	12	46	12
4	46	12	46	12
1-1977	46	12	46	12
2	46	12	46	12
3	46	12	46	12
4	46	12	46	12
1-1978	46	12	46	12
2	46	12	46	12
3	46	12	46	12
4	46	12	46	12
1-1979	46	12	46	12
2	46	12	46	12
3	46	12	46	12
4	46	12	46	12
1-1980	46	12	46	12
2	46	12	46	12
3	46	12	46	12
4	46	12	46	12
1-1981	46	12	46	12
2	46	12	46	12
3	46	12	46	12
4	46	12	46	12
1-1982	46	12	46	12
2	43	11	42	11

241-BX-101 SINGLE-SHELL
TANK LEVEL HISTORY

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Total (in)
3	43	11	42	11
4	43	11	42	11
1-1983	43	11	42	11
2	43	11	42	11
3	43	11	42	11
4	43	11	42	11
1-1984	43	11	42	11
2	43	11	42	11
3	43	11	42	11
4	43	11	42	11
1-1985	43	11	42	11
2	43	11	42	11
3	43	11	42	11
4	43	11	42	11
1-1986	43	11	42	11
2	43	11	42	11
3	43	11	42	11
4	43	11	42	11
1-1987	43	11	42	11
2	43	11	42	11
3	43	11	42	11
4	43	11	42	11
1-1988	43	11	42	11
2	43	11	42	11
3	43	11	42	11
4	43	11	42	11
1-1989	43	11	42	11
2	43	11	42	11
3	43	11	42	11
4	43	11	42	11
1-1990	43	11	42	11
2	43	11	42	11
3	43	11	42	11
4	43	11	42	11
1-1991	43	11	42	11
2	43	11	42	11
3	43	11	42	11
4	43	11	42	11
1-1992	43	11	42	11
2	43	11	42	11
3	43	11	42	11
4	43	11	42	11
1-1993	43	11	42	11
2	43	11	42	11
3				
4				

**241-BX-102 SINGLE-SHELL
TANK LEVEL HISTORY**

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Total (in)
1-1948				
2	111	36		
3	523	186		
4	523	186		
1-1949	523	186		
2	523	186		
3	523	186		
4	523	186		
1-1950	523	186		
2	523	186		
3	523	186		
4	523	186		
1-1951	523	186		
2	523	186		
3				
4				
1-1952				
2	467	165		
3	467	165		
4	467	165		
1-1953	467	165		
2	380	134		
3	346	121		
4	386	136		
1-1954	136	45		
2	12	0		
3	0	-12		
4	0	-12		
1-1955	0	-12		
2	0	-12		
3	0	-12		
4	0	-12		
1-1956	0	-12		
2	0	-12		
3	439	155		
4	43	11		
1-1957	51	14		
2	51	14		
3	51	14		
4	51	14		
1-1958	54	15		
2	57	16		
3	54	15		
4	54	15		
1-1959	54	15		
2	54	15		

**241-BX-102 SINGLE-SHELL
TANK LEVEL HISTORY**

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Total (in)
3	54	15		
4	54	15		
1-1960	54	15		
2	54	15		
3	54	15		
4	54	15		
1-1961				
2	57	16		
3				
4	59	17		
1-1962				
2	359	126		
3				
4	549	195		
1-1963				
2	549	195		
3				
4	549	195		
1-1964				
2	549	195	95	30
3				
4	549	195	94	30
1-1965				
2	543	193	62	18
3	543	193	62	18
4	543	193	62	18
1-1966	543	193	62	18
2	543	193	62	18
3	543	193	62	18
4	546	194	62	18
1-1967	546	194	62	18
2	546	194	62	18
3	546	194	62	18
4	543	193	62	18
1-1968	513	182	62	18
2	539	191	62	18
3	426	150	62	18
4	520	185	61	18
1-1969	520	185	63	18
2	520	185	72	22
3	487	173	51	14
4	508	180	40	10
1-1970	233	80	35	8
2	41	10	35	8
3	40	10	40	10
4	40	10	40	10

241-BX-102 SINGLE-SHELL
TANK LEVEL HISTORY

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Total (in)
1-1971	40	10	40	10
2	40	10	40	10
3	40	10	40	10
4	41	10	41	10
1-1972	41	10	41	10
2	41	10	41	10
3	41	10	41	10
4	41	10	41	10
1-1973	41	10	41	10
2	41	10	41	10
3	41	10	41	10
4	41	10	41	10
1-1974	41	10	41	10
2	41	10	41	10
3	41	10	41	10
4	40	10	40	10
1-1975	40	10	40	10
2	40	10	40	10
3	40	10	40	10
4	40	10	40	10
1-1976	40	10	40	10
2	40	10	40	10
3	40	10	40	10
4	40	10	40	10
1-1977	40	10	40	10
2	40	10	40	10
3	40	10	40	10
4	40	10	40	10
1-1978	40	10	40	10
2	40	10	40	10
3	40	10	40	10
4	40	10	40	10
1-1979	40	10	40	10
2	40	10	40	10
3	40	10	40	10
4	40	10	40	10
1-1980	40	10	40	10
2	40	10	40	10
3	40	10	40	10
4	40	10	40	10
1-1981	40	10	40	10
2	40	10	40	10
3	40	10	40	10
4	40	10	40	10
1-1982	40	10	40	10
2	95	30	95	30

**241-BX-102 SINGLE-SHELL
TANK LEVEL HISTORY**

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Total (in)
3	95	30	95	30
4	96	30	96	30
1-1983	96	30	96	30
2	96	30	96	30
3	96	30	96	30
4	96	30	96	30
1-1984	96	30	96	30
2	96	30	96	30
3	96	30	96	30
4	96	30	96	30
1-1985	96	30	96	30
2	96	30	96	30
3	96	30	96	30
4	96	30	96	30
1-1986	96	30	96	30
2	96	30	96	30
3	96	30	96	30
4	96	30	96	30
1-1987	96	30	96	30
2	96	30	96	30
3	96	30	96	30
4	96	30	96	30
1-1988	96	30	96	30
2	96	30	96	30
3	96	30	96	30
4	96	30	96	30
1-1989	96	30	96	30
2	96	30	96	30
3	96	30	96	30
4	96	30	96	30
1-1990	96	30	96	30
2	96	30	96	30
3	96	30	96	30
4	96	30	96	30
1-1991	96	30	96	30
2	96	30	96	30
3	96	30	96	30
4	96	30	96	30
1-1992	96	30	96	30
2	96	30	96	30
3	96	30	96	30
4	96	30	96	30
1-1993	96	30	96	30
2	96	30	96	30
3				
4				

241-BX-103 SINGLE-SHELL
TANK LEVEL HISTORY

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
1-1948				
2				
3	9	-1		
4	491	174		
1-1949	523	186		
2	523	186		
3	523	186		
4	523	186		
1-1950	523	186		
2	523	186		
3	523	186		
4	523	186		
1-1951	523	186		
2	523	186		
3				
4				
1-1952				
2	530	188		
3	530	188		
4	530	188		
1-1953	530	188		
2	530	188		
3	530	188		
4	530	188		
1-1954	0	-12		
2	61	18		
3	0	-12		
4	0	-12		
1-1955	0	-12		
2	0	-12		
3	0	-12		
4	0	-12		
1-1956	0	-12		
2	0	-12		
3	530	188		
4	45	12		
1-1957	45	12		
2	54	15		
3	40	10		
4	40	10		
1-1958	37	9		
2	37	9		
3	37	9		
4	37	9		
1-1959	37	9		
2	37	9		

**241-BX-103 SINGLE-SHELL
TANK LEVEL HISTORY**

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
3	37	9		
4	45	12		
1-1960	45	12		
2	48	13		
3	48	13		
4	48	13		
1-1961				
2	54	15		
3				
4	54	15		
1-1962				
2	54	15		
3				
4	538	191		
1-1963				
2	538	191		
3				
4	538	191		
1-1964				
2	522	185	95	30
3				
4	516	183	95	30
1-1965				
2	527	187	90	28
3	527	187	90	28
4	527	187	90	28
1-1966	527	187	90	28
2	527	187	90	28
3	527	187	90	28
4	527	187	90	28
1-1967	527	187	90	28
2	527	187	90	28
3	527	187	90	28
4	557	198	90	28
1-1968	307	107	90	28
2	209	71	90	28
3	343	120	90	28
4	314	110	74	22
1-1969	378	133	72	22
2	243	84	76	23
3	224	77	18	2
4	304	106	62	18
1-1970	110	35	37	9
2	425	150	51	14
3	389	137	48	13
4	542	193	51	14

**241-BX-103 SINGLE-SHELL
TANK LEVEL HISTORY**

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
1-1971	442	156	51	14
2	541	192	51	14
3	437	154	51	14
4	406	143	54	15
1-1972	420	148	54	15
2	542	193	54	15
3	362	127	11	-1
4	399	141	11	-1
1-1973	322	113	34	8
2	487	173	34	8
3	488	173	34	8
4	503	178	46	12
1-1974	503	178	46	12
2	504	179	46	12
3	504	179	46	12
4	205	70	65	19
1-1975	293	102	54	15
2	238	82	54	15
3	499	177	54	15
4	169	57	54	15
1-1976	208	71	54	15
2	158	53	54	15
3	158	53	54	15
4	178	60	54	15
1-1977	189	64	76	23
2	76	23	76	23
3	76	23	76	23
4	76	23	76	23
1-1978	76	23	76	23
2	76	23	76	23
3	76	23	76	23
4	76	23	76	23
1-1979	76	23	76	23
2	76	23	76	23
3	76	23	76	23
4	76	23	76	23
1-1980	76	23	76	23
2	76	23	76	23
3	76	23	76	23
4	76	23	76	23
1-1981	76	23	76	23
2	76	23	76	23
3	76	23	76	23
4	76	23	76	23
1-1982	76	23	76	23
2	63	18	63	18

241-BX-103 SINGLE-SHELL
TANK LEVEL HISTORY

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
3	63	18	62	18
4	63	18	62	18
1-1983	63	18	62	18
2	63	18	62	18
3	63	18	62	18
4	64	19	62	18
1-1984	65	19	62	18
2	65	19	62	18
3	65	19	62	18
4	65	19	62	18
1-1985	66	19	62	18
2	66	19	62	18
3	66	19	62	18
4	66	19	62	18
1-1986	66	19	62	18
2	66	19	62	18
3	66	19	62	18
4	66	19	62	18
1-1987	66	19	62	18
2	66	19	62	18
3	66	19	62	18
4	66	19	62	18
1-1988	66	19	62	18
2	66	19	62	18
3	66	19	62	18
4	66	19	62	18
1-1989	66	19	62	18
2	66	19	62	18
3	66	19	62	18
4	66	19	62	18
1-1990	66	19	62	18
2	66	19	62	18
3	66	19	62	18
4	66	19	62	18
1-1991	66	19	62	18
2	66	19	62	18
3	66	19	62	18
4	66	19	62	18
1-1992	66	19	62	18
2	66	19	62	18
3	66	19	62	18
4	66	19	62	18
1-1993	66	19	62	18
2	66	19	62	18
3				
4				

241-BX-104 SINGLE-SHELL
TANK LEVEL HISTORY

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
1-1948				
2				
3				
4				
1-1949	1	-4		
2	523	186		
3	523	186		
4	523	186		
1-1950	523	186		
2	523	186		
3	523	186		
4	523	186		
1-1951	523	186		
2	523	186		
3				
4				
1-1952				
2	530	188		
3	530	188		
4	530	188		
1-1953	530	188		
2	530	188		
3	530	188		
4	530	188		
1-1954	530	188		
2	430	152		
3	80	25	80	25
4	145	48	7	-2
1-1955	20	3	1	-4
2	0	-12		
3	0	-12		
4	0	-12		
1-1956	0	-12		
2	530	188		
3	530	188		
4	530	188		
1-1957	51	14		
2	51	14		
3	54	15		
4	54	15		
1-1958	54	15		
2	54	15		
3	54	15		
4	54	15		
1-1959	54	15		
2	54	15		

241-BX-104 SINGLE-SHELL
TANK LEVEL HISTORY

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
3	54	15		
4	76	23		
1-1960	57	16		
2	57	16		
3	57	16		
4	57	16		
1-1961				
2	59	17		
3				
4	62	18		
1-1962				
2	62	18		
3				
4	530	188		
1-1963				
2	557	198	112	36
3				
4	557	198	112	36
1-1964				
2	569	202	112	36
3				
4	569	202	112	36
1-1965				
2	571	203	87	27
3	571	203	87	27
4	571	203	87	27
1-1966	571	203	87	27
2	571	203	87	27
3	571	203	87	27
4	571	203	87	27
1-1967	571	203	87	27
2	571	203	87	27
3	571	203	87	27
4	183	62	87	27
1-1968	491	174	87	27
2	290	101	87	27
3	399	141	87	27
4	481	170	73	22
1-1969	227	78	90	28
2	260	90	88	27
3	524	186	57	16
4	519	184	65	19
1-1970	520	185	65	19
2	96	30	65	19
3	65	19	65	19
4	70	21	65	19

**241-BX-104 SINGLE-SHELL
TANK LEVEL HISTORY**

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
1-1971	523	186	68	20
2	466	165	68	20
3	473	167	68	20
4	487	173	78	24
1-1972	443	157	41	10
2	246	85	41	10
3	246	85	41	10
4	364	128	41	10
1-1973	512	182	62	18
2	496	176	62	18
3	495	175	62	18
4	501	178	62	18
1-1974	149	50	106	34
2	277	96	106	34
3	480	170	106	34
4	389	137	65	19
1-1975	403	142	65	19
2	414	146	65	19
3	211	72	65	19
4	290	101	65	19
1-1976	351	123	179	61
2	252	87	65	19
3	299	104	65	19
4	235	81	65	19
1-1977	447	158	65	19
2	373	131	76	23
3	241	83	79	24
4	142	47	79	24
1-1978	279	97	114	37
2	263	91	134	44
3	271	94	134	44
4	312	109	136	45
1-1979	136	45	136	45
2	136	45	136	45
3	147	49	136	45
4	216	74	136	45
1-1980	172	58	136	45
2	352	123	136	45
3	342	120	136	45
4	110	35	90	28
1-1981	110	35	90	28
2	110	35	90	28
3	110	35	90	28
4	110	35	90	28
1-1982	110	35	90	28
2	114	37	90	28

241-BX-104 SINGLE-SHELL
TANK LEVEL HISTORY

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
3	114	37	90	28
4	114	37	90	28
1-1983	114	37	90	28
2	114	37	90	28
3	114	37	90	28
4	114	37	90	28
1-1984	120	39	89	28
2	120	39	89	28
3	120	39	89	28
4	120	39	89	28
1-1985	123	40	89	28
2	123	40	89	28
3	123	40	89	28
4	123	40	89	28
1-1986	123	40	89	28
2	123	40	89	28
3	123	40	89	28
4	123	40	89	28
1-1987	123	40	89	28
2	123	40	89	28
3	123	40	89	28
4	123	40	89	28
1-1988	123	40	89	28
2	123	40	89	28
3	123	40	89	28
4	123	40	89	28
1-1989	123	40	89	28
2	123	40	89	28
3	99	31	96	30
4	99	31	96	30
1-1990	99	31	96	30
2	99	31	96	30
3	99	31	96	30
4	99	31	96	30
1-1991	99	31	96	30
2	99	31	96	30
3	99	31	96	30
4	99	31	96	30
1-1992	99	31	96	30
2	99	31	96	30
3	99	31	96	30
4	99	31	96	30
1-1993	99	31	96	30
2	99	31	96	30
3				
4				

**241-BX-105 SINGLE-SHELL
TANK LEVEL HISTORY**

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
1-1948				
2				
3				
4				
1-1949				
2	361	127		
3	523	186		
4	523	186		
1-1950	523	186		
2	523	186		
3	523	186		
4	523	186		
1-1951	523	186		
2	523	186		
3				
4				
1-1952				
2	530	188		
3	530	188		
4	530	188		
1-1953	530	188		
2	530	188		
3	530	188		
4	530	188		
1-1954	530	188		
2	512	182		
3	48	13		
4	54	15	5	-3
1-1955	37	9	1	-4
2	1	-4		
3	1	-4		
4	60	17		
1-1956	60	17		
2	60	17		
3	524	186		
4	524	186		
1-1957	224	77		
2	224	77		
3	62	18		
4	62	18		
1-1958	62	18		
2	62	18		
3	62	18		
4	62	18		
1-1959	98	31		
2	98	31		

241-BX-105 SINGLE-SHELL
TANK LEVEL HISTORY

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
3	98	31		
4	98	31		
1-1960	98	31		
2	98	31		
3	98	31		
4	98	31		
1-1961				
2	98	31		
3				
4	101	32		
1-1962				
2	101	32		
3				
4	101	32		
1-1963				
2	546	194	106	34
3				
4	546	194	106	34
1-1964				
2	440	155	106	34
3				
4	541	192	106	34
1-1965				
2	538	191	98	31
3	538	191	98	31
4	538	191	98	31
1-1966	538	191	98	31
2	538	191	98	31
3	538	191	98	31
4	535	190	98	31
1-1967	535	190	98	31
2	535	190	98	31
3	535	190	98	31
4	534	190	98	31
1-1968	435	154	95	30
2	538	191	98	31
3	109	35	98	31
4	546	194	98	31
1-1969	546	194	98	31
2	546	194	98	31
3	513	182	65	19
4	513	182	65	19
1-1970	514	182	65	19
2	514	182	65	19
3	513	182	65	19
4	513	182	65	19

**241-BX-105 SINGLE-SHELL
TANK LEVEL HISTORY**

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
1-1971	514	182	65	19
2	520	185	65	19
3	523	186	65	19
4	523	186	65	19
1-1972	516	183	52	14
2	201	69	0	-12
3	194	66	52	14
4	56	16	52	14
1-1973	359	126	52	14
2	486	172	52	14
3	485	172	52	14
4	481	170	52	14
1-1974	101	32	52	14
2	411	145	52	14
3	416	147	52	14
4	417	147	54	15
1-1975	417	147	54	15
2	436	154	54	15
3	436	154	54	15
4	189	64	54	15
1-1976	508	180	54	15
2	508	180	54	15
3	508	180	54	15
4	436	154	54	15
1-1977	472	167	54	15
2	427	151	62	18
3	131	43	79	24
4	131	43	79	24
1-1978	134	44	79	24
2	128	42	62	18
3	114	37	65	19
4	211	72	73	22
1-1979	281	98	73	22
2	249	86	73	22
3	114	37	73	22
4	112	36	73	22
1-1980	172	58	73	22
2	378	133	57	16
3	305	106	57	16
4	82	25	57	16
1-1981	62	18	57	16
2	62	18	57	16
3	62	18	57	16
4	62	18	57	16
1-1982	62	18	57	16
2	83	26	55	15

241-BX-105 SINGLE-SHELL
TANK LEVEL HISTORY

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
3	83	26	55	15
4	83	26	55	15
1-1983	83	26	55	15
2	83	26	55	15
3	83	26	55	15
4	83	26	55	15
1-1984	83	26	55	15
2	83	26	55	15
3	83	26	55	15
4	83	26	55	15
1-1985	84	26	55	15
2	84	26	55	15
3	84	26	55	15
4	84	26	55	15
1-1986	94	30	55	15
2	84	26	55	15
3	51	14	46	12
4	51	14	46	12
1-1987	51	14	46	12
2	51	14	46	12
3	51	14	46	12
4	51	14	46	12
1-1988	51	14	46	12
2	51	14	46	12
3	51	14	46	12
4	51	14	46	12
1-1989	51	14	46	12
2	51	14	46	12
3	51	14	46	12
4	51	14	46	12
1-1990	51	14	46	12
2	51	14	46	12
3	51	14	47	13
4	51	14	46	12
1-1991	51	14	46	12
2	51	14	46	12
3	51	14	46	12
4	51	14	46	12
1-1992	51	14	46	12
2	51	14	46	12
3	51	14	46	12
4	51	14	46	12
1-1993	51	14	46	12
2	51	14	46	12
3				
4				

**241-BX-106 SINGLE-SHELL
TANK LEVEL HISTORY**

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
1-1948				
2				
3				
4				
1-1949				
2				
3	78	24		
4	470	166		
1-1950	523	186		
2	523	186		
3	523	186		
4	523	186		
1-1951	523	186		
2	523	186		
3				
4				
1-1952				
2	530	188		
3	530	188		
4	530	188		
1-1953	530	188		
2	530	188		
3	530	188		
4	530	188		
1-1954	530	188		
2	530	188		
3	1	-4		
4	1	-4		
1-1955	34	8		
2	0	-12		
3	0	-12		
4	0	-12		
1-1956	0	-12		
2	524	186		
3	524	186		
4	524	186		
1-1957	505	179		
2	521	185		
3	57	16		
4	57	16		
1-1958	57	16		
2	57	16		
3	57	16		
4	57	16		
1-1959	98	31		
2	98	31		

241-BX-106 SINGLE-SHELL
TANK LEVEL HISTORY

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
3	98	31		
4	98	31		
1-1960	98	31		
2	98	31		
3	98	31		
4	98	31		
1-1961				
2	98	31		
3				
4	98	31		
1-1962				
2	98	31		
3				
4	98	31		
1-1963				
2	541	192		
3				
4	541	192		
1-1964				
2	541	192		
3				
4	543	193		
1-1965				
2	543	193	54	15
3	543	193	54	15
4	543	193	54	15
1-1966	543	193	54	15
2	543	193	54	15
3	543	193	54	15
4	543	193	54	15
1-1967	541	192	54	15
2	541	192	54	15
3	65	19	54	15
4	62	18	54	15
1-1968	480	170	54	15
2	480	170	54	15
3	403	142	54	15
4	33	7	33	7
1-1969	550	195	33	7
2	552	196	33	7
3	517	183	0	-12
4	516	183	0	-12
1-1970	514	182	0	-12
2	334	117	0	-12
3	334	117	0	-12
4	541	192	37	9

**241-BX-106 SINGLE-SHELL
TANK LEVEL HISTORY**

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
1-1971	411	145	43	11
2	495	175	43	11
3	466	165	43	11
4	466	165	51	14
1-1972	465	165	65	19
2	318	111	40	10
3	202	69	10	-1
4	200	68	10	-1
1-1973	73	22	10	-1
2	347	122	10	-1
3	348	122	10	-1
4	348	122	10	-1
1-1974	394	139	10	-1
2	182	62	10	-1
3	251	87	10	-1
4	315	110	26	5
1-1975	464	164	26	5
2	230	79	26	5
3	230	79	26	5
4	230	79	26	5
1-1976	277	96	26	5
2	323	113	26	5
3	323	113	26	5
4	101	32	26	5
1-1977	233	80	26	5
2	70	21	26	5
3	43	11	29	6
4	43	11	29	6
1-1978	43	11	29	6
2	43	11	29	6
3	43	11	29	6
4	43	11	29	6
1-1979	43	11	29	6
2	43	11	29	6
3	43	11	29	6
4	43	11	29	6
1-1980	43	11	29	6
2	43	11	29	6
3	43	11	29	6
4	43	11	29	6
1-1981	43	11	29	6
2	43	11	29	6
3	43	11	29	6
4	43	11	29	6
1-1982	43	11	29	6
2	41	10	31	7

**241-BX-106 SINGLE-SHELL
TANK LEVEL HISTORY**

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
3	41	10	31	7
4	41	10	31	7
1-1983	41	10	31	7
2	41	10	31	7
3	41	10	31	7
4	41	10	31	7
1-1984	41	10	31	7
2	41	10	31	7
3	41	10	31	7
4	41	10	31	7
1-1985	46	12	31	7
2	46	12	31	7
3	46	12	31	7
4	46	12	31	7
1-1986	46	12	31	7
2	46	12	31	7
3	46	12	31	7
4	46	12	31	7
1-1987	46	12	31	7
2	46	12	31	7
3	46	12	31	7
4	46	12	31	7
1-1988	46	12	31	7
2	46	12	31	7
3	46	12	31	7
4	46	12	31	7
1-1989	46	12	31	7
2	46	12	31	7
3	46	12	31	7
4	46	12	31	7
1-1990	46	12	31	7
2	46	12	31	7
3	46	12	31	7
4	46	12	31	7
1-1991	46	12	31	7
2	46	12	31	7
3	46	12	31	7
4	46	12	31	7
1-1992	46	12	31	7
2	46	12	31	7
3	46	12	31	7
4	46	12	31	7
1-1993	46	12	31	7
2	46	12	31	7
3				
4				

241-BX-107 SINGLE-SHELL
TANK LEVEL HISTORY

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
1-1948				
2				
3	41	10		
4	332	116		
1-1949	523	186		
2	523	186		
3	523	186		
4	523	186		
1-1950	523	186		
2	523	186		
3	523	186		
4	523	186		
1-1951	523	186		
2	523	186		
3				
4				
1-1952				
2	530	188		
3	530	188		
4	437	154		
1-1953	437	154	437	154
2	530	188	437	154
3	530	188	437	154
4	530	188	437	154
1-1954	530	188	437	154
2	530	188	437	154
3	530	188	437	154
4	530	188	437	154
1-1955	530	188	437	154
2	530	188	437	154
3	530	188	437	154
4	530	188	437	154
1-1956	530	188	437	154
2	530	188	437	154
3	530	188	437	154
4	530	188	437	154
1-1957	530	188	437	154
2	565	201	437	154
3	565	201	437	154
4	565	201	437	154
1-1958	565	201	437	154
2	563	200	437	154
3	563	200	437	154
4	563	200	437	154
1-1959	563	200	437	154
2	563	200	437	154

**241-BX-107 SINGLE-SHELL
TANK LEVEL HISTORY**

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
3	563	200	437	154
4	563	200	437	154
1-1960	563	200	437	154
2	563	200	437	154
3	563	200	437	154
4	563	200	437	154
1-1961				
2	563	200	437	154
3				
4	565	201	437	154
1-1962				
2	563	200	437	154
3				
4	563	200	437	154
1-1963				
2	560	199	447	158
3				
4	560	199	447	158
1-1964				
2	558	198	447	158
3				
4	549	195	447	158
1-1965				
2	563	200	428	151
3	563	200	428	151
4	563	200	428	151
1-1966	563	200	428	151
2	563	200	428	151
3	563	200	428	151
4	563	200	428	151
1-1967	563	200	428	151
2	563	200	428	151
3	563	200	428	151
4	563	200	428	151
1-1968	567	202	428	151
2	568	202	428	151
3	567	202	428	151
4	409	144	409	144
1-1969	409	144	409	144
2	409	144	409	144
3	541	192	376	132
4	541	192	376	132
1-1970	541	192	376	132
2	541	192	376	132
3	541	192	376	132
4	541	192	376	132

**241-BX-107 SINGLE-SHELL
TANK LEVEL HISTORY**

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
1-1971	541	192	376	132
2	538	191	376	132
3	538	191	376	132
4	538	191	376	132
1-1972	538	191	376	132
2	538	191	376	132
3	538	191	376	132
4	538	191	376	132
1-1973	537	191	376	132
2	537	191	376	132
3	541	192	376	132
4	539	191	376	132
1-1974	539	191	376	132
2	539	191	376	132
3	474	168	376	132
4	472	167	376	132
1-1975	472	167	376	132
2	472	167	376	132
3	472	167	376	132
4	472	167	376	132
1-1976	472	167	376	132
2	472	167	376	132
3	475	168	376	132
4	475	168	376	132
1-1977	475	168	376	132
2	376	132	376	132
3	376	132	376	132
4	376	132	376	132
1-1978	376	132	376	132
2	376	132	376	132
3	376	132	376	132
4	376	132	376	132
1-1979	376	132	376	132
2	376	132	376	132
3	376	132	376	132
4	376	132	376	132
1-1980	376	132	376	132
2	376	132	376	132
3	376	132	376	132
4	376	132	376	132
1-1981	376	132	376	132
2	376	132	376	132
3	376	132	376	132
4	376	132	376	132
1-1982	376	132	376	132
2	369	130	361	127

241-BX-107 SINGLE-SHELL
TANK LEVEL HISTORY

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
3	369	130	361	127
4	369	130	361	127
1-1983	369	130	361	127
2	369	130	361	127
3	369	130	361	127
4	369	130	361	127
1-1984	370	130	361	127
2	370	130	361	127
3	370	130	361	127
4	370	130	361	127
1-1985	370	130	361	127
2	370	130	361	127
3	370	130	361	127
4	370	130	361	127
1-1986	370	130	361	127
2	370	130	361	127
3	370	130	361	127
4	370	130	361	127
1-1987	370	130	361	127
2	370	130	361	127
3	370	130	361	127
4	370	130	361	127
1-1988	370	130	361	127
2	370	130	361	127
3	370	130	361	127
4	370	130	361	127
1-1989	370	130	361	127
2	370	130	361	127
3	370	130	361	127
4	370	130	361	127
1-1990	370	130	361	127
2	354	124	354	124
3	345	121	344	121
4	345	121	344	121
1-1991	345	121	344	121
2	345	121	344	121
3	345	121	344	121
4	345	121	344	121
1-1992	345	121	344	121
2	345	121	344	121
3	345	121	344	121
4	345	121	344	121
1-1993	345	121	344	121
2	345	121	344	121
3				
4				

241-BX-108 SINGLE-SHELL
TANK LEVEL HISTORY

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Total (in)
1-1948				
2				
3				
4				
1-1949	136	45		
2	390	137		
3	523	186		
4	523	186		
1-1950	523	186		
2	523	186		
3	523	186		
4	523	186		
1-1951	523	186		
2	523	186		
3				
4				
1-1952				
2	530	188		
3	530	188		
4	21	3		
1-1953	10	-1	10	-1
2	530	188	10	-1
3	530	188	10	-1
4	530	188	10	-1
1-1954	276	96	10	-1
2	530	188	10	-1
3	530	188	10	-1
4	530	188	10	-1
1-1955	530	188	88	27
2	530	188	88	27
3	530	188	88	27
4	530	188	88	27
1-1956	530	188	88	27
2	530	188	88	27
3	530	188	88	27
4	530	188	88	27
1-1957	535	190	88	27
2	568	202	88	27
3	568	202	88	27
4	87	27	87	27
1-1958	87	27	87	27
2	84	26	80	25
3	84	26	80	25
4	84	26	80	25
1-1959	84	26	80	25
2	84	26	80	25

**241-BX-108 SINGLE-SHELL
TANK LEVEL HISTORY**

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Total (in)
3	84	26	80	25
4	84	26	80	25
1-1960	84	26	80	25
2	84	26	80	25
3	84	26	80	25
4	84	26	80	25
1-1961				
2	84	26	80	25
3				
4	90	28	80	25
1-1962				
2	90	28	80	25
3				
4	90	28	80	25
1-1963				
2	92	29	57	16
3				
4	90	28	57	16
1-1964				
2	544	193	57	16
3				
4	544	193	57	16
1-1965				
2	530	188	90	28
3	530	188	90	28
4	530	188	90	28
1-1966	530	188	90	28
2	530	188	90	28
3	530	188	90	28
4	530	188	90	28
1-1967	530	188	90	28
2	530	188	90	28
3	530	188	90	28
4	530	188	90	28
1-1968	530	188	90	28
2	530	188	90	28
3	530	188	90	28
4	87	27	87	27
1-1969	87	27	87	27
2	539	191	87	27
3	506	179	54	15
4	506	179	54	15
1-1970	506	179	54	15
2	506	179	54	15
3	506	179	54	15
4	508	180	54	15

**241-BX-108 SINGLE-SHELL
TANK LEVEL HISTORY**

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Total (in)
1-1971	508	180	54	15
2	505	179	54	15
3	505	179	54	15
4	506	179	54	15
1-1972	505	179	54	15
2	502	178	34	8
3	505	179	34	8
4	508	180	34	8
1-1973	74	22	34	8
2	72	22	34	8
3	72	22	34	8
4	71	21	34	8
1-1974	34	8	34	8
2	34	8	34	8
3	34	8	34	8
4	15	1	13	0
1-1975	15	1	13	0
2	15	1	13	0
3	15	1	13	0
4	15	1	13	0
1-1976	15	1	13	0
2	15	1	15	1
3	15	1	15	1
4	15	1	15	1
1-1977	15	1	15	1
2	15	1	15	1
3	15	1	15	1
4	15	1	15	1
1-1978	26	5	26	5
2	26	5	26	5
3	26	5	26	5
4	26	5	26	5
1-1979	26	5	26	5
2	26	5	26	5
3	26	5	26	5
4	26	5	26	5
1-1980	26	5	26	5
2	26	5	26	5
3	26	5	26	5
4	26	5	26	5
1-1981	26	5	26	5
2	26	5	26	5
3	26	5	26	5
4	26	5	26	5
1-1982	26	5	26	5
2	26	5	26	5

241-BX-108 SINGLE-SHELL
TANK LEVEL HISTORY

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Total (in)
3	26	5	26	5
4	26	5	26	5
1-1983	26	5	26	5
2	26	5	26	5
3	26	5	26	5
4	26	5	26	5
1-1984	26	5	26	5
2	26	5	26	5
3	26	5	26	5
4	26	5	26	5
1-1985	26	5	26	5
2	26	5	26	5
3	26	5	26	5
4	26	5	26	5
1-1986	26	5	26	5
2	26	5	26	5
3	26	5	26	5
4	26	5	26	5
1-1987	26	5	26	5
2	26	5	26	5
3	26	5	26	5
4	26	5	26	5
1-1988	26	5	26	5
2	26	5	26	5
3	26	5	26	5
4	26	5	26	5
1-1989	26	5	26	5
2	26	5	26	5
3	26	5	26	5
4	26	5	26	5
1-1990	26	5	26	5
2	5	-3	5	-3
3	5	-3	5	-3
4	26	5	12	0
1-1991	26	5	26	5
2	26	5	26	5
3	26	5	26	5
4	26	5	26	5
1-1992	26	5	26	5
2	26	5	26	5
3	26	5	26	5
4	26	5	26	5
1-1993	26	5	26	5
2	26	5	26	5
3				
4				

241-BX-109 SINGLE-SHELL
TANK LEVEL HISTORY

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
1-1948				
2				
3				
4				
1-1949				
2				
3				
4				
1-1950				
2				
3				
4	160	54		
1-1951	160	54		
2	160	54		
3				
4				
1-1952				
2	530	188		
3	530	188		
4	530	188		
1-1953	530	188	34	8
2	530	188	34	8
3	524	186	34	8
4	183	62	34	8
1-1954	349	122	34	8
2	377	133	34	8
3	520	185	314	110
4	520	185	314	110
1-1955	520	185	298	104
2	520	185	298	104
3	520	185	298	104
4	520	185	298	104
1-1956	520	185	298	104
2	520	185	298	104
3	520	185	298	104
4	520	185	298	104
1-1957	519	184	298	104
2	552	196	320	112
3	549	195	320	112
4	304	106	298	104
1-1958	307	107	298	104
2	304	106	298	104
3	304	106	298	104
4	304	106	298	104
1-1959	304	106	298	104
2	304	106	298	104

**241-BX-109 SINGLE-SHELL
TANK LEVEL HISTORY**

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
3	304	106	298	104
4	304	106	298	104
1-1960	304	106	298	104
2	304	106	298	104
3	304	106	298	104
4	304	106	298	104
1-1961				
2	301	105	298	104
3				
4	301	105	298	104
1-1962				
2	301	105	298	104
3				
4	301	105	298	104
1-1963				
2	301	105	298	104
3				
4	301	105	298	104
1-1964				
2	301	105	244	84
3				
4	541	192	244	84
1-1965				
2	541	192	296	103
3	541	192	296	103
4	541	192	296	103
1-1966	541	192	296	103
2	541	192	296	103
3	541	192	296	103
4	538	191	296	103
1-1967	538	191	296	103
2	538	191	296	103
3	538	191	296	103
4	556	198	296	103
1-1968	557	198	296	103
2	557	198	296	103
3	557	198	296	103
4	283	98	283	98
1-1969	514	182	283	98
2	514	182	283	98
3	487	173	250	86
4	486	172	250	86
1-1970	486	172	250	86
2	486	172	250	86
3	486	172	250	86
4	483	171	250	86

**241-BX-109 SINGLE-SHELL
TANK LEVEL HISTORY**

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
1-1971	484	171	250	86
2	486	172	250	86
3	475	168	250	86
4	475	168	250	86
1-1972	473	167	250	86
2	475	168	211	72
3	473	167	211	72
4	491	174	211	72
1-1973	488	173	211	72
2	213	73	211	72
3	211	72	211	72
4	211	72	211	72
1-1974	211	72	211	72
2	211	72	211	72
3	211	72	211	72
4	205	70	200	68
1-1975	205	70	200	68
2	205	70	200	68
3	205	70	200	68
4	208	71	200	68
1-1976	208	71	200	68
2	208	71	208	71
3	208	71	208	71
4	208	71	208	71
1-1977	208	71	208	71
2	208	71	208	71
3	208	71	208	71
4	208	71	208	71
1-1978	208	71	208	71
2	208	71	208	71
3	208	71	208	71
4	208	71	208	71
1-1979	208	71	208	71
2	208	71	208	71
3	208	71	208	71
4	208	71	208	71
1-1980	208	71	208	71
2	208	71	208	71
3	208	71	208	71
4	208	71	208	71
1-1981	208	71	208	71
2	208	71	208	71
3	208	71	208	71
4	208	71	208	71
1-1982	208	71	208	71
2	206	70	206	70

241-BX-109 SINGLE-SHELL
TANK LEVEL HISTORY

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
3	206	70	199	68
4	206	70	199	68
1-1983	206	70	199	68
2	206	70	199	68
3	206	70	199	68
4	206	70	199	68
1-1984	206	70	199	68
2	206	70	199	68
3	206	70	199	68
4	206	70	199	68
1-1985	206	70	199	68
2	206	70	199	68
3	206	70	199	68
4	206	70	199	68
1-1986	199	68	197	67
2	199	68	197	67
3	199	68	197	67
4	199	68	197	67
1-1987	199	68	197	67
2	199	68	197	67
3	199	68	197	67
4	199	68	197	67
1-1988	199	68	197	67
2	199	68	197	67
3	199	68	197	67
4	199	68	197	67
1-1989	199	68	197	67
2	199	68	197	67
3	199	68	197	67
4	199	68	197	67
1-1990	199	68	197	67
2	199	68	197	67
3	193	66	193	66
4	193	66	193	66
1-1991	193	66	193	66
2	193	66	193	66
3	193	66	193	66
4	193	66	193	66
1-1992	193	66	193	66
2	193	66	193	66
3	193	66	193	66
4	193	66	193	66
1-1993	193	66	193	66
2	193	66	193	66
3				
4				

**241-BX-110 SINGLE-SHELL
TANK LEVEL HISTORY**

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Total (in)
1-1948				
2				
3				
4				
1-1949				
2				
3	66	19		
4	414	146		
1-1950	523	186		
2	523	186		
3	523	186		
4	523	186		
1-1951	523	186		
2	523	186		
3				
4				
1-1952				
2	530	188		
3	530	188		
4	530	188		
1-1953	530	188	133	44
2	530	188	133	44
3	530	188	133	44
4	322	113	133	44
1-1954	276	96	276	96
2	530	188	236	81
3	530	188	236	81
4	530	188	236	81
1-1955	530	188	236	81
2	530	188	236	81
3	530	188	236	81
4	530	188	236	81
1-1956	530	188	236	81
2	530	188	236	81
3	530	188	236	81
4	530	188	236	81
1-1957	497	176	236	81
2	527	187	248	86
3	527	187	248	86
4	326	114	326	114
1-1958	326	114	326	114
2	367	129	326	114
3	367	129	326	114
4	367	129	326	114
1-1959	367	129	326	114
2	368	129	326	114

**241-BX-110 SINGLE-SHELL
TANK LEVEL HISTORY**

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Total (in)
3	368	129	326	114
4	368	129	326	114
1-1960	368	129	326	114
2	368	129	326	114
3	368	129	326	114
4	368	129	326	114
1-1961				
2	367	129	326	114
3				
4	389	137	326	114
1-1962				
2	392	138	326	114
3				
4	395	139	326	114
1-1963				
2	395	139	197	67
3				
4	392	138	197	67
1-1964				
2	392	138	197	67
3				
4	546	194	197	67
1-1965				
2	543	193	277	96
3	543	193	277	96
4	543	193	277	96
1-1966	543	193	277	96
2	543	193	277	96
3	543	193	277	96
4	543	193	277	96
1-1967	543	193	277	96
2	543	193	277	96
3	543	193	277	96
4	543	193	277	96
1-1968	554	197	277	96
2	554	197	277	96
3	554	197	277	96
4	315	110	277	96
1-1969	542	193	277	96
2	542	193	277	96
3	509	181	156	52
4	509	181	156	52
1-1970	509	181	156	52
2	224	77	156	52
3	227	78	156	52
4	227	78	156	52

**241-BX-110 SINGLE-SHELL
TANK LEVEL HISTORY**

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Total (in)
1-1971	227	78	156	52
2	231	79	156	52
3	224	77	156	52
4	231	79	156	52
1-1972	464	164	290	101
2	491	174	227	78
3	492	174	227	78
4	494	175	227	78
1-1973	510	181	227	78
2	514	182	238	82
3	501	178	238	82
4	499	177	238	82
1-1974	499	177	288	100
2	500	177	288	100
3	500	177	288	100
4	499	177	249	86
1-1975	499	177	249	86
2	499	177	249	86
3	499	177	249	86
4	499	177	249	86
1-1976	499	177	250	86
2	499	177	249	86
3	499	177	249	86
4	499	177	249	86
1-1977	499	177	249	86
2	249	86	249	86
3	249	86	249	86
4	249	86	249	86
1-1978	249	86	249	86
2	249	86	249	86
3	249	86	249	86
4	249	86	249	86
1-1979	249	86	249	86
2	249	86	249	86
3	249	86	249	86
4	249	86	249	86
1-1980	202	69	200	68
2	202	69	200	68
3	202	69	200	68
4	202	69	200	68
1-1981	202	69	200	68
2	202	69	200	68
3	202	69	200	68
4	202	69	200	68
1-1982	202	69	200	68
2	205	70	201	69

241-BX-110 SINGLE-SHELL
TANK LEVEL HISTORY

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Total (in)
3	205	70	201	69
4	205	70	201	69
1-1983	205	70	201	69
2	205	70	201	69
3	205	70	201	69
4	205	70	201	69
1-1984	205	70	201	69
2	205	70	201	69
3	205	70	201	69
4	211	72	205	70
1-1985	211	72	205	70
2	211	72	205	70
3	198	67	196	67
4	198	67	196	67
1-1986	198	67	196	67
2	198	67	196	67
3	198	67	196	67
4	198	67	196	67
1-1987	198	67	196	67
2	198	67	196	67
3	198	67	196	67
4	198	67	196	67
1-1988	198	67	196	67
2	198	67	196	67
3	198	67	196	67
4	198	67	196	67
1-1989	198	67	196	67
2	198	67	196	67
3	198	67	196	67
4	198	67	196	67
1-1990	199	68	198	67
2	199	68	198	67
3	199	68	198	67
4	199	68	198	67
1-1991	199	68	198	67
2	199	68	198	67
3	199	68	198	67
4	199	68	198	67
1-1992	199	68	198	67
2	199	68	198	67
3	199	68	198	67
4	199	68	198	67
1-1993	199	68	198	67
2	199	68	198	67
3	199	68	198	67
4	198	67	198	67

241-BX-111 SINGLE-SHELL
TANK LEVEL HISTORY

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Total (in)	LOW (in)
1-1948					
2					
3					
4					
1-1949					
2					
3					
4					
1-1950	281	98			
2	523	186			
3	523	186			
4	523	186			
1-1951	523	186			
2	523	186			
3					
4					
1-1952					
2	525	186			
3	525	186			
4	525	186			
1-1953	525	186			
2	530	188			
3	530	188			
4	530	188			
1-1954	530	188	32	7	
2	256	89	32	7	
3	530	188	32	7	
4	530	188	32	7	
1-1955	530	188	32	7	
2	530	188	32	7	
3	530	188	32	7	
4	530	188	32	7	
1-1956	530	188	32	7	
2	530	188	32	7	
3	530	188	32	7	
4	530	188	32	7	
1-1957	535	190	32	7	
2	568	202	62	18	
3	568	202	62	18	
4	51	14	51	14	
1-1958	51	14	51	14	
2	51	14	51	14	
3	51	14	51	14	
4	51	14	51	14	
1-1959	51	14	51	14	
2	51	14	51	14	

241-BX-111 SINGLE-SHELL
TANK LEVEL HISTORY

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Total (in)	LOW (in)
3	51	14	51	14	
4	51	14	51	14	
1-1960	51	14	51	14	
2	51	14	51	14	
3	51	14	51	14	
4	51	14	51	14	
1-1961					
2	51	14	51	14	
3					
4	57	16	51	14	
1-1962					
2					
3					
4					
1-1963					
2	57	16	51	14	
3					
4	57	16	51	14	
1-1964					
2	544	193	51	14	
3					
4	543	193	51	14	
1-1965					
2	541	192	79	24	
3	541	192	79	24	
4	541	192	79	24	
1-1966	541	192	79	24	
2	541	192	79	24	
3	541	192	79	24	
4	541	192	79	24	
1-1967	541	192	79	24	
2	541	192	79	24	
3	541	192	79	24	
4	541	192	79	24	
1-1968	540	192	79	24	
2	540	192	79	24	
3	343	120	79	24	
4	107	34	79	24	
1-1969	107	34	79	24	
2	390	137	79	24	
3	506	179	33	7	
4	505	179	33	7	
1-1970	505	179	33	7	
2	505	179	33	7	
3	47	13	33	7	
4	48	13	33	7	

241-BX-111 SINGLE-SHELL
TANK LEVEL HISTORY

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Total (in)	LOW (in)
1-1971	51	14	33	7	
2	47	13	33	7	
3	102	33	33	7	
4	235	81	33	7	
1-1972	395	139	118	38	
2	362	127	68	20	
3	363	127	68	20	
4	400	141	68	20	
1-1973	239	82	68	20	
2	308	107	128	42	
3	281	98	128	42	
4	321	112	128	42	
1-1974	387	136	234	81	
2	404	142	234	81	
3	508	180	234	81	
4	508	180	216	74	
1-1975	508	180	216	74	
2	508	180	216	74	
3	508	180	216	74	
4	508	180	216	74	
1-1976	510	181	216	74	
2	510	181	216	74	
3	510	181	216	74	
4	510	181	216	74	
1-1977	475	168	216	74	
2	260	90	216	74	
3	230	79	216	74	
4	233	80	211	72	
1-1978	233	80	211	72	
2	233	80	211	72	
3	233	80	211	72	
4	233	80	211	72	
1-1979	233	80	211	72	
2	233	80	211	72	
3	233	80	211	72	
4	233	80	211	72	
1-1980	233	80	211	72	
2	233	80	211	72	
3	233	80	211	72	
4	233	80	211	72	
1-1981	233	80	211	72	
2	233	80	211	72	
3	233	80	211	72	
4	233	80	211	72	
1-1982	233	80	211	72	
2	233	80	211	72	

**241-BX-111 SINGLE-SHELL
TANK LEVEL HISTORY**

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Total (in)	LOW (in)
3	233	80	211	72	
4	233	80	211	72	
1-1983	233	80	211	72	
2	233	80	211	72	
3	233	80	211	72	
4	233	80	211	72	
1-1984	233	80	211	72	
2	233	80	211	72	
3	233	80	211	72	
4	233	80	211	72	
1-1985	236	81	211	72	
2	236	81	211	72	
3	236	81	211	72	
4	236	81	211	72	
1-1986	230	79	211	72	79
2	230	79	211	72	
3	230	79	211	72	
4	230	79	211	72	79
1-1987	230	79	211	72	78
2	230	79	211	72	80
3	230	79	211	72	79
4	230	79	211	72	79
1-1988	230	79	211	72	79
2	230	79	211	72	78
3	230	79	211	72	79
4	230	79	211	72	79
1-1989	230	79	211	72	79
2	230	79	211	72	80
3	230	79	211	72	79
4	230	79	211	72	79
1-1990	230	79	211	72	79
2	230	79	211	72	
3	230	79	211	72	80
4	230	79	211	72	80
1-1991	230	79	211	72	80
2	230	79	211	72	79
3	230	79	211	72	80
4	230	79	211	72	79
1-1992	230	79	211	72	79
2	230	79	211	72	
3	230	79	211	72	
4	230	79	211	72	80
1-1993	230	79	211	72	79
2	230	79	211	72	80
3	230	79	211	72	79
4	211	72	211	72	79

**241-BX-112 SINGLE-SHELL
TANK LEVEL HISTORY**

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
1-1948				
2				
3				
4				
1-1949				
2				
3				
4				
1-1950				
2				
3				
4				
1-1951				
2				
3				
4				
1-1952				
2	530	188		
3	530	188		
4	530	188		
1-1953	530	188	239	82
2	530	188	239	82
3	530	188	239	82
4	323	113	239	82
1-1954	323	113	270	94
2	320	112	270	94
3	391	138	270	94
4	391	138	270	94
1-1955	391	138	270	94
2	391	138	270	94
3	391	138	270	94
4	391	138	270	94
1-1956	391	138	270	94
2	391	138	270	94
3	391	138	270	94
4	391	138	270	94
1-1957	398	140	270	94
2	433	153	287	100
3	433	153	287	100
4	433	153	287	100
1-1958	433	153	287	100
2	433	153	287	100
3	433	153	287	100
4	433	153	287	100
1-1959	433	153	287	100
2	433	153	287	100

241-BX-112 SINGLE-SHELL
TANK LEVEL HISTORY

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
3	433	153	287	100
4	433	153	287	100
1-1960	439	155	287	100
2	439	155	287	100
3	441	156	287	100
4	441	156	287	100
1-1961				
2	450	159	287	100
3				
4	453	160	287	100
1-1962				
2	450	159	287	100
3				
4	450	159	287	100
1-1963				
2	453	160	271	94
3				
4	453	160	271	94
1-1964				
2	450	159	271	94
3				
4	549	195	271	94
1-1965				
2	546	194	318	111
3	546	194	318	111
4	546	194	318	111
1-1966	546	194	318	111
2	546	194	318	111
3	546	194	318	111
4	546	194	318	111
1-1967	546	194	318	111
2	546	194	318	111
3	541	192	318	111
4	541	192	318	111
1-1968	554	197	318	111
2	554	197	318	111
3	354	124	318	111
4	354	124	318	111
1-1969	532	189	318	111
2	532	189	318	111
3	499	177	134	44
4	499	177	134	44
1-1970	499	177	134	44
2	499	177	134	44
3	499	177	134	44
4	499	177	134	44

**241-BX-112 SINGLE-SHELL
TANK LEVEL HISTORY**

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
1-1971	499	177	134	44
2	499	177	134	44
3	499	177	134	44
4	499	177	134	44
1-1972	498	177	134	44
2	497	176	134	44
3	496	176	232	80
4	508	180	232	80
1-1973	512	182	216	74
2	511	181	216	74
3	497	176	216	74
4	496	176	216	74
1-1974	495	175	216	74
2	216	74	216	74
3	216	74	216	74
4	194	66	178	60
1-1975	194	66	178	60
2	194	66	178	60
3	194	66	178	60
4	194	66	178	60
1-1976	194	66	178	60
2	194	66	178	60
3	202	69	178	60
4	202	69	178	60
1-1977	202	69	178	60
2	178	60	178	60
3	178	60	178	60
4	178	60	178	60
1-1978	178	60	178	60
2	178	60	178	60
3	178	60	178	60
4	169	57	169	57
1-1979	169	57	169	57
2	169	57	169	57
3	169	57	169	57
4	169	57	169	57
1-1980	169	57	169	57
2	169	57	169	57
3	169	57	169	57
4	169	57	169	57
1-1981	169	57	169	57
2	169	57	169	57
3	169	57	169	57
4	169	57	169	57
1-1982	169	57	169	57
2	170	57	166	56

241-BX-112 SINGLE-SHELL
TANK LEVEL HISTORY

WHC-SD-WM-ER-311, Rev.0

Year	Total (K gal)	Total (in)	Solids (K gal)	Solids (in)
3	170	57	166	56
4	170	57	166	56
1-1983	170	57	166	56
2	170	57	166	56
3	170	57	166	56
4	170	57	166	56
1-1984	170	57	166	56
2	170	57	166	56
3	170	57	166	56
4	170	57	166	56
1-1985	170	57	166	56
2	170	57	166	56
3	170	57	157	53
4	170	57	157	53
1-1986	170	57	157	53
2	170	57	157	53
3	170	57	157	53
4	170	57	157	53
1-1987	170	57	157	53
2	170	57	157	53
3	170	57	157	53
4	170	57	157	53
1-1988	170	57	157	53
2	170	57	157	53
3	170	57	157	53
4	170	57	157	53
1-1989	170	57	157	53
2	170	57	157	53
3	170	57	157	53
4	170	57	157	53
1-1990	170	57	157	53
2	170	57	157	53
3	165	55	164	55
4	165	55	164	55
1-1991	165	55	164	55
2	165	55	164	55
3	165	55	164	55
4	165	55	164	55
1-1992	165	55	164	55
2	165	55	164	55
3	165	55	164	55
4	165	55	164	55
1-1993	165	55	164	55
2	165	55	164	55
3				
4				

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

**241-BX-101
Thermocouple 11**

(Thermocouple Elevation Unavailable)

**241-BX-101
Thermocouple 12**

(Thermocouple Elevation Unavailable)

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

**241-BX-103
Thermocouple 3**

(Thermocouple Elevation Unavailable)

**241-BX-103
Thermocouple 4**

(Thermocouple Elevation Unavailable)

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

**241-BX-104
Thermocouple 1**

(Thermocouple Elevation Unavailable)

**241-BX-104
Thermocouple 2**

(Thermocouple Elevation Unavailable)

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

241-BX-104
Thermocouple 3

(Thermocouple Elevation Unavailable)

241-BX-104
Thermocouple 4

(Thermocouple Elevation Unavailable)

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

**241-BX-104
Thermocouple 5**

(Thermocouple Elevation Unavailable)

**241-BX-104
Thermocouple 6**

(Thermocouple Elevation Unavailable)

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

**241-BX-105
Thermocouple 3**

(Thermocouple Elevation Unavailable)

**241-BX-105
Thermocouple 4**

(Thermocouple Elevation Unavailable)

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

**241-BX-105
Thermocouple 11**

(Thermocouple Elevation Unavailable)

**241-BX-105
Thermocouple 12**

(Thermocouple Elevation Unavailable)

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

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Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

**241-BX-107
Thermocouple 11**

(Thermocouple Elevation Unavailable)

**241-BX-107
Thermocouple 12**

(Thermocouple Elevation Unavailable)

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

241-BX-107
Thermocouple 13
 (Thermocouple Elevation Unavailable)

241-BX-107
Thermocouple 14
 (Thermocouple Elevation Unavailable)

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

241-BX-110
Thermocouple 11
 21.3 ft.

241-BX-110
Thermocouple 12
 23.3 ft.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

**241-BX-111
Thermocouple 3**

5.2 ft.

**241-BX-111
Thermocouple 4**

7.2 ft.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

**241-BX-112
Thermocouple 3**

(Thermocouple Elevation Unavailable)

**241-BX-112
Thermocouple 4**

(Thermocouple Elevation Unavailable)

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

241-BX-112
Thermocouple 11

241-BX-112
Thermocouple 12

(Thermocouple Elevation Unavailable)

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-101							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO. #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	9/18/74	1	1	27	80	N	degree C/TWINS confirm
1	9/18/74	2	1	24	75	N	degree C/TWINS confirm
1	9/18/74	4	1	27	80	N	degree C/TWINS confirm
1	9/18/74	5	1	27	80	N	degree C/TWINS confirm
1	9/18/74	6	1	27	80	N	degree C/TWINS confirm
1	9/18/74	7	1	27	80	N	degree C/TWINS confirm
1	9/18/74	8	1	27	80	N	degree C/TWINS confirm
1	9/18/74	9	1	27	80	Y	degree C/TWINS confirm
1	9/18/74	10	1	27	80	N	degree C/TWINS confirm
1	9/18/74	11	1	27	80	N	degree C/TWINS confirm
1	9/18/74	12	1	27	80	N	degree C/TWINS confirm
1	9/18/74	13	1	27	80	N	degree C/TWINS confirm
1	12/11/74	1	1	19	66	N	degree C/TWINS confirm
1	12/11/74	2	1	16	61	N	degree C/TWINS confirm
1	12/11/74	3	1	10	50	N	degree C/TWINS confirm
1	12/11/74	4	1	21	70	N	degree C/TWINS confirm
1	12/11/74	5	1	21	70	N	degree C/TWINS confirm
1	12/11/74	6	1	21	70	N	degree C/TWINS confirm
1	12/11/74	7	1	21	70	N	degree C/TWINS confirm
1	12/11/74	8	1	21	70	N	degree C/TWINS confirm
1	12/11/74	9	1	21	70	N	degree C/TWINS confirm
1	12/11/74	10	1	21	70	N	degree C/TWINS confirm
1	12/11/74	11	1	21	70	N	degree C/TWINS confirm
1	12/11/74	12	1	21	70	N	degree C/TWINS confirm
1	7/25/75	1	1		78	Y	
1	7/25/75	2	1		75	N	
1	7/25/75	3	1		62	N	
1	7/25/75	4	1		75	N	
1	7/25/75	5	1		74	N	
1	7/25/75	6	1		75	N	
1	7/25/75	7	1		74	N	
1	7/25/75	8	1		75	N	
1	7/25/75	9	1		75	N	
1	7/25/75	10	1		75	N	
1	7/25/75	11	1		75	N	
1	7/25/75	12	1		75	N	
1	8/26/75	1	1		84	N	
1	8/26/75	2	1		83	N	
1	8/26/75	3	1		70	N	
1	8/26/75	4	1		83	N	
1	8/26/75	5	1		83	N	
1	8/26/75	6	1		83	N	
1	8/26/75	7	1		83	N	
1	8/26/75	8	1		84	N	
1	8/26/75	9	1		84	N	
1	8/26/75	10	1		84	N	
1	8/26/75	11	1		85	Y	
1	8/26/75	12	1		85	N	
1	2/10/76	2	1		70	N	
1	2/10/76	3	1		63	N	
1	2/10/76	4	1		71	Y	
1	2/10/76	5	1		71	N	
1	2/10/76	6	1		71	N	
1	2/10/76	7	1		71	N	
1	2/10/76	8	1		71	N	
1	2/10/76	9	1		71	N	
1	2/10/76	10	1		71	N	
1	2/10/76	11	1		71	N	
1	2/10/76	12	1		69	N	
1	4/5/76	2	1		63	N	
1	4/5/76	3	1		56	N	
1	4/5/76	4	1		63	N	
1	4/5/76	5	1		63	N	
1	4/5/76	6	1		64	N	
1	4/5/76	7	1		64	N	
1	4/5/76	8	1		64	N	
1	4/5/76	9	1		64	N	
1	4/5/76	10	1		65	Y	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-101							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO. #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	4/5/76	11	1		64	N	
1	4/5/76	12	1		63	N	
1	7/20/76	2	1		62	N	
1	7/20/76	3	1		55	N	
1	7/20/76	4	1		62	N	
1	7/20/76	5	1		61	N	
1	7/20/76	6	1		61	N	
1	7/20/76	7	1		61	N	
1	7/20/76	8	1		61	N	
1	7/20/76	9	1		61	N	
1	7/20/76	10	1		65	Y	
1	7/20/76	11	1		64	N	
1	7/20/76	12	1		63	N	
1	8/3/76	1	1		55	N	
1	8/3/76	2	1		77	N	
1	8/3/76	3	1		70	N	
1	8/3/76	4	1		78	N	
1	8/3/76	5	1		78	N	
1	8/3/76	6	1		79	Y	
1	8/3/76	7	1		79	N	
1	8/3/76	8	1		79	N	
1	8/3/76	9	1		79	N	
1	8/3/76	10	1		79	N	
1	8/3/76	11	1		79	N	
1	8/3/76	12	1		79	N	
1	1/11/77	1	1		71	N	
1	1/11/77	2	1		86	Y	
1	1/11/77	3	1		81	N	
1	1/11/77	4	1		85	N	
1	1/11/77	5	1		85	N	
1	1/11/77	6	1		85	N	
1	1/11/77	7	1		85	N	
1	1/11/77	8	1		85	N	
1	1/11/77	9	1		85	N	
1	1/11/77	10	1		85	N	
1	1/11/77	11	1		82	N	
1	1/11/77	12	1		81	N	
1	2/13/77	1	1		72	N	
1	2/13/77	2	1		85	N	
1	2/13/77	3	1		81	N	
1	2/13/77	4	1		86	Y	
1	2/13/77	5	1		86	N	
1	2/13/77	6	1		86	N	
1	2/13/77	7	1		86	N	
1	2/13/77	8	1		86	N	
1	2/13/77	9	1		86	N	
1	2/13/77	10	1		86	N	
1	2/13/77	11	1		84	N	
1	2/13/77	12	1		84	N	
1	3/16/77	1	1		54	N	
1	3/16/77	2	1		66	N	
1	3/16/77	3	1		62	N	
1	3/16/77	4	1		67	N	
1	3/16/77	5	1		67	N	
1	3/16/77	6	1		68	N	
1	3/16/77	7	1		68	N	
1	3/16/77	8	1		69	Y	
1	3/16/77	9	1		69	N	
1	3/16/77	10	1		68	N	
1	3/16/77	11	1		60	N	
1	3/16/77	12	1		67	N	
1	4/21/77	1	1		49	N	
1	4/21/77	2	1		61	Y	
1	4/21/77	3	1		56	N	
1	4/21/77	4	1		61	N	
1	4/21/77	5	1		60	N	
1	4/21/77	6	1		60	N	
1	4/21/77	7	1		60	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-101							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO. #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	4/21/77	8	1		60	N	
1	4/21/77	9	1		61	N	
1	4/21/77	10	1		61	N	
1	4/21/77	11	1		53	N	
1	4/21/77	12	1		60	N	
1	6/8/77	1	1		60	N	
1	6/8/77	2	1		72	Y	
1	6/8/77	3	1		67	N	
1	6/8/77	4	1		72	N	
1	6/8/77	5	1		72	N	
1	6/8/77	6	1		72	N	
1	6/8/77	7	1		71	N	
1	6/8/77	8	1		71	N	
1	6/8/77	9	1		71	N	
1	6/8/77	10	1		71	N	
1	6/8/77	11	1		64	N	
1	6/8/77	12	1		71	N	
1	7/26/77	1	1		49	N	
1	7/26/77	2	1		62	Y	
1	7/26/77	3	1		51	N	
1	7/26/77	4	1		61	N	
1	7/26/77	5	1		61	N	
1	7/26/77	6	1		61	N	
1	7/26/77	7	1		61	N	
1	7/26/77	8	1		61	N	
1	7/26/77	10	1		61	N	
1	7/26/77	11	1		56	N	
1	7/26/77	12	1		62	N	
1	8/21/77	1	1		47	N	
1	8/21/77	2	1		59	N	
1	8/21/77	3	1		54	N	
1	8/21/77	4	1		59	N	
1	8/21/77	5	1		60	N	
1	8/21/77	6	1		60	N	
1	8/21/77	7	1		60	N	
1	8/21/77	8	1		60	N	
1	8/21/77	9	1		60	N	
1	8/21/77	10	1		60	N	
1	8/21/77	11	1		56	N	
1	8/21/77	12	1		61	Y	
1	10/24/77	1	1		63	N	
1	10/24/77	2	1		76	Y	
1	10/24/77	3	1		68	N	
1	10/24/77	4	1		76	N	
1	10/24/77	5	1		76	N	
1	10/24/77	6	1		76	N	
1	10/24/77	7	1		76	N	
1	10/24/77	8	1		76	N	
1	10/24/77	9	1		76	N	
1	10/24/77	10	1		76	N	
1	10/24/77	11	1		72	N	
1	10/24/77	12	1		74	N	
1	1/16/78	2	1		73	Y	
1	1/16/78	3	1		64	N	
1	1/16/78	4	1		73	N	
1	1/16/78	5	1		73	N	
1	1/16/78	6	1		74	N	
1	1/16/78	7	1		74	N	
1	1/16/78	8	1		74	N	
1	1/16/78	9	1		73	N	
1	1/16/78	10	1		73	N	
1	1/16/78	12	1		69	N	
1	2/26/78	2	1		73	N	
1	2/26/78	3	1		59	N	
1	2/26/78	4	1		73	N	
1	2/26/78	5	1		74	Y	
1	2/26/78	6	1		74	N	
1	2/26/78	7	1		74	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-101

THERMOCOUPLE DATA

TREE #	DATE	THERMO. #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	2/26/78	8	1		74	N	
1	2/26/78	9	1		74	N	
1	2/26/78	10	1		74	N	
1	4/27/78	2	1		65	Y	
1	4/27/78	3	1		64	N	
1	4/27/78	4	1		65	N	
1	4/27/78	5	1		65	N	
1	4/27/78	6	1		65	N	
1	4/27/78	7	1		65	N	
1	4/27/78	8	1		65	N	
1	4/27/78	9	1		65	N	
1	4/27/78	10	1		65	N	
1	4/27/78	12	1		64	N	
1	6/17/78	1	1		57	N	
1	6/17/78	2	1		63	N	
1	6/17/78	3	1		61	N	
1	6/17/78	4	1		63	N	
1	6/17/78	5	1		63	N	
1	6/17/78	6	1		63	N	
1	6/17/78	7	1		63	N	
1	6/17/78	8	1		63	N	
1	6/17/78	9	1		64	Y	
1	6/17/78	10	1		64	N	
1	6/17/78	12	1		64	N	
1	7/16/78	1	1		68	N	
1	7/16/78	2	1		76	N	
1	7/16/78	3	1		76	N	
1	7/16/78	4	1		76	N	
1	7/16/78	5	1		76	N	
1	7/16/78	6	1		77	N	
1	7/16/78	7	1		78	N	
1	7/16/78	8	1		79	Y	
1	7/16/78	9	1		78	N	
1	7/16/78	10	1		76	N	
1	7/16/78	12	1		77	N	
1	8/13/78	1	1		60	N	
1	8/13/78	2	1		68	Y	
1	8/13/78	3	1		66	N	
1	8/13/78	4	1		68	N	
1	8/13/78	5	1		68	N	
1	8/13/78	6	1		68	N	
1	8/13/78	7	1		68	N	
1	8/13/78	8	1		68	N	
1	8/13/78	9	1		68	N	
1	8/13/78	10	1		68	N	
1	9/11/78	1	1		62	N	
1	9/11/78	2	1		70	Y	
1	9/11/78	3	1		67	N	
1	9/11/78	4	1		69	N	
1	9/11/78	5	1		69	N	
1	9/11/78	6	1		68	N	
1	9/11/78	7	1		68	N	
1	9/11/78	8	1		68	N	
1	9/11/78	9	1		68	N	
1	9/11/78	10	1		68	N	
1	9/11/78	12	1		68	N	
1	11/11/78	1	1		68	N	
1	11/11/78	2	1		75	N	
1	11/11/78	3	1		74	N	
1	11/11/78	4	1		78	Y	
1	11/11/78	5	1		78	N	
1	11/11/78	6	1		78	N	
1	11/11/78	7	1		78	N	
1	11/11/78	8	1		78	N	
1	11/11/78	9	1		78	N	
1	11/11/78	10	1		78	N	
1	11/11/78	12	1		78	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-101							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO. #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	12/23/78	1	1		64	N	
1	12/23/78	2	1		70	N	
1	12/23/78	3	1		70	N	
1	12/23/78	4	1		71	N	
1	12/23/78	5	1		71	N	
1	12/23/78	9	1		72	Y	
1	12/23/78	10	1		71	N	
1	12/23/78	12	1		69	N	
1	1/5/79	1	1		70	N	
1	1/5/79	2	1		77	Y	
1	1/5/79	3	1		75	N	
1	1/5/79	4	1		77	N	
1	1/5/79	5	1		71	N	
1	1/5/79	6	1		71	N	
1	1/5/79	7	1		71	N	
1	1/5/79	8	1		71	N	
1	1/5/79	9	1		75	N	
1	1/5/79	10	1		76	N	
1	1/5/79	12	1		74	N	
1	2/7/79	1	1		77	N	
1	2/7/79	2	1		82	N	
1	2/7/79	3	1		81	N	
1	2/7/79	4	1		83	Y	
1	2/7/79	5	1		83	N	
1	2/7/79	9	1		81	N	
1	2/7/79	10	1		82	N	
1	3/8/79	8	1		68	N	
1	3/8/79	9	1		67	N	
1	3/8/79	10	1		69	Y	
1	3/8/79	12	1		67	N	
1	1/9/80	1	1		62	N	
1	1/9/80	2	1		81	Y	
1	1/9/80	3	1		81	N	
1	1/9/80	4	1		81	N	
1	1/9/80	5	1		81	N	
1	1/9/80	6	1		81	N	
1	1/9/80	7	1		81	N	
1	1/9/80	8	1		81	N	
1	1/9/80	9	1		74	N	
1	1/9/80	10	1		81	N	
1	7/5/80	1	1		58	N	
1	7/5/80	2	1		66	Y	
1	7/5/80	3	1		66	N	
1	7/5/80	4	1		65	N	
1	7/5/80	5	1		66	N	
1	7/5/80	6	1		66	N	
1	7/5/80	7	1		66	N	
1	7/5/80	8	1		66	N	
1	7/5/80	9	1		63	N	
1	7/5/80	10	1		65	N	
1	7/5/80	12	1		64	N	
1	8/12/80	1	1		63	N	
1	8/12/80	2	1		71	N	
1	8/12/80	3	1		69	N	
1	8/12/80	4	1		71	N	
1	8/12/80	5	1		71	N	
1	8/12/80	6	1		71	N	
1	8/12/80	7	1		71	N	
1	8/12/80	8	1		75	Y	
1	8/12/80	9	1		69	N	
1	8/12/80	10	1		71	N	
1	8/12/80	12	1		70	N	
1	9/11/80	1	1		68	N	
1	9/11/80	2	1		78	Y	
1	9/11/80	3	1		75	N	
1	9/11/80	4	1		78	N	
1	9/11/80	5	1		78	N	
1	9/11/80	6	1		78	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-101							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO. #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	9/11/80	7	1		78	N	
1	9/11/80	8	1		78	N	
1	9/11/80	9	1		76	N	
1	9/11/80	10	1		78	N	
1	9/11/80	12	1		77	N	
1	10/10/80	1	1	23	73	N	raw data - assumed degree C
1	10/26/80	1	1		73	N	
1	10/26/80	2	1		79	Y	
1	10/26/80	3	1		77	N	
1	10/26/80	4	1		79	N	
1	10/26/80	5	1		79	N	
1	10/26/80	6	1		79	N	
1	10/26/80	7	1		79	N	
1	10/26/80	8	1		79	N	
1	10/26/80	9	1		78	N	
1	10/26/80	10	1		77	N	
1	10/26/80	11	1		52	N	
1	10/26/80	12	1		77	N	
1	1/19/82	1	1		75	N	
1	1/19/82	2	1		79	N	
1	1/19/82	3	1		78	N	
1	1/19/82	4	1		80	Y	
1	1/19/82	5	1		80	N	
1	1/19/82	6	1		80	N	
1	1/19/82	7	1		80	N	
1	1/19/82	8	1		80	N	
1	1/19/82	9	1		79	N	
1	1/19/82	10	1		80	N	
1	1/19/82	11	1		64	N	
1	4/6/82	1	1		54	N	
1	4/6/82	2	1		57	N	
1	4/6/82	3	1		56	N	
1	4/6/82	4	1		58	N	
1	4/6/82	5	1		59	Y	
1	4/6/82	6	1		59	N	
1	4/6/82	7	1		59	N	
1	4/6/82	8	1		59	N	
1	4/6/82	9	1		59	N	
1	4/6/82	10	1		59	N	
1	4/6/82	12	1		58	N	
1	4/6/82	13	1		58	N	
1	7/13/82	1	1		69	N	
1	7/13/82	2	1		69	N	
1	7/13/82	3	1		69	N	
1	7/13/82	4	1		69	N	
1	7/13/82	5	1		69	N	
1	7/13/82	6	1		69	N	
1	7/13/82	7	1		69	N	
1	7/13/82	8	1		69	N	
1	7/13/82	9	1		69	N	
1	7/13/82	10	1		69	N	
1	7/13/82	11	1		70	Y	
1	7/13/82	12	1		70	N	
1	10/16/82	1	1		71	N	
1	10/16/82	2	1		77	Y	
1	10/16/82	3	1		75	N	
1	10/16/82	4	1		77	N	
1	10/16/82	5	1		77	N	
1	10/16/82	6	1		77	N	
1	10/16/82	7	1		77	N	
1	10/16/82	8	1		77	N	
1	10/16/82	9	1		77	N	
1	10/16/82	10	1		77	N	
1	10/16/82	12	1		77	N	
-1	1/8/83	1	1		66	N	
1	1/8/83	2	1		70	N	
1	1/8/83	3	1		69	N	
1	1/8/83	4	1		70	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-101							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO. #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	1/8/83	5	1		71	Y	
1	1/8/83	6	1		70	N	
1	1/8/83	7	1		70	N	
1	1/8/83	8	1		70	N	
1	1/8/83	9	1		70	N	
1	1/8/83	10	1		70	N	
1	1/8/83	12	1		67	N	
1	4/3/83	1	1		63	N	
1	4/3/83	2	1		66	N	
1	4/3/83	3	1		65	N	
1	4/3/83	4	1		66	N	
1	4/3/83	5	1		66	N	
1	4/3/83	6	1		66	N	
1	4/3/83	7	1		67	N	
1	4/3/83	8	1		69	Y	
1	4/3/83	9	1		66	N	
1	4/3/83	10	1		67	N	
1	4/3/83	12	1		66	N	
1	2/11/84	1	1		65	N	
1	2/11/84	2	1		68	N	
1	2/11/84	3	1		67	N	
1	2/11/84	4	1		69	N	
1	2/11/84	5	1		72	N	
1	2/11/84	6	1		75	Y	
1	2/11/84	7	1		75	N	
1	2/11/84	8	1		75	N	
1	2/11/84	9	1		75	N	
1	2/11/84	10	1		70	N	
1	2/11/84	12	1		67	N	
1	11/21/91	1	1			N	J-890523512-47 OUT OF SERVICE
1	1/2/92	1	1		64	N	J-910126143-29 TC #9-11 BAD DATA
1	1/2/92	2	1		69	N	
1	1/2/92	3	1		65	N	
1	1/2/92	4	1		70	N	
1	1/2/92	5	1		70	N	
1	1/2/92	6	1		70	N	
1	1/2/92	7	1		71	Y	
1	1/2/92	8	1		68	N	
1	1/2/92	12	1		69	N	
1	7/2/92	1	1			N	UNABLE TO GET RDGS
1	11/4/92	1	1			N	#S&DA-92-488 NO RDGS SINCE JANUARY 1992
1	11/6/92	1	1		74	N	J 817-13-55-001 TC#12 BAD
1	11/6/92	2	1		75	N	
1	11/6/92	3	1		75	N	
1	11/6/92	4	1		76	Y	
1	11/6/92	5	1		75	N	
1	11/6/92	6	1		75	N	
1	11/6/92	7	1		76	N	
1	11/6/92	8	1		76	N	
1	11/6/92	9	1		65	N	
1	11/6/92	10	1		59	N	
1	1/1/93	1	1			N	UNABLE TO GET READINGS
1	6/12/93	12	1		62	N	
1	7/24/93	1	1			N	NO THERMOCOUPLE READINGS O/S
1	7/31/93	1	1			N	TC#1-14 O/S
1	8/5/93	1	1		65	Y	J 91012643-39
1	8/5/93	2	1		64	N	
1	8/5/93	3	1		64	N	
1	8/5/93	4	1		64	N	
1	8/5/93	5	1		64	N	
1	8/5/93	6	1		64	N	
1	8/5/93	7	1		64	N	
1	8/5/93	8	1		64	N	
1	8/5/93	9	1		64	N	
1	8/5/93	10	1		64	N	
1	8/5/93	11	1		64	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102						
THERMOCOUPLE DATA						
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP
1	4/5/75	1	1		63	Y
1	4/5/75	2	1		60	N
1	4/5/75	3	1		59	N
1	4/5/75	4	1		59	N
1	4/5/75	5	1		59	N
1	4/5/75	6	1		59	N
1	4/5/75	7	1		59	N
1	4/5/75	8	1		59	N
1	4/5/75	9	1		60	N
1	4/5/75	10	1		59	N
1	4/5/75	11	1		57	N
1	7/20/76	1	1		60	Y
1	7/20/76	2	1		58	N
1	7/20/76	3	1		58	N
1	7/20/76	4	1		58	N
1	7/20/76	5	1		57	N
1	7/20/76	6	1		57	N
1	7/20/76	7	1		57	N
1	7/20/76	8	1		57	N
1	7/20/76	9	1		57	N
1	7/20/76	10	1		57	N
1	7/20/76	11	1		57	N
1	7/20/76	12	1		57	N
1	1/11/77	1	1		83	Y
1	1/11/77	2	1		79	N
1	1/11/77	3	1		79	N
1	1/11/77	4	1		79	N
1	1/11/77	5	1		79	N
1	1/11/77	6	1		79	N
1	1/11/77	7	1		79	N
1	1/11/77	8	1		79	N
1	1/11/77	9	1		79	N
1	1/11/77	10	1		79	N
1	1/11/77	11	1		77	N
1	7/21/77	1	1		60	Y
1	7/21/77	2	1		59	N
1	7/21/77	3	1		58	N
1	7/21/77	4	1		58	N
1	7/21/77	5	1		57	N
1	7/21/77	6	1		57	N
1	7/21/77	7	1		57	N
1	7/21/77	8	1		57	N
1	7/21/77	9	1		57	N
1	7/21/77	11	1		57	N
1	10/24/77	1	1		70	N
1	10/24/77	2	1		70	N
1	10/24/77	3	1		70	N
1	10/24/77	4	1		70	N
1	10/24/77	5	1		70	N
1	10/24/77	6	1		70	N
1	10/24/77	7	1		70	N
1	10/24/77	8	1		70	N
1	10/24/77	9	1		70	N
1	10/24/77	10	1		70	N
1	10/24/77	11	1		71	Y
1	1/16/78	1	1		68	Y
1	1/16/78	2	1		65	N
1	1/16/78	3	1		66	N
1	1/16/78	4	1		66	N
1	1/16/78	5	1		66	N
1	1/16/78	6	1		66	N
1	1/16/78	7	1		66	N
1	1/16/78	8	1		66	N
1	1/16/78	9	1		66	N
1	1/16/78	10	1		66	N
1	1/16/78	11	1		66	N
1	1/16/78	12	1		66	N
1	4/24/78	1	1		72	Y

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	4/24/78	2	1		69	N	
1	4/24/78	3	1		63	N	
1	4/24/78	4	1		63	N	
1	4/24/78	5	1		62	N	
1	4/24/78	6	1		62	N	
1	4/24/78	7	1		62	N	
1	4/24/78	8	1		62	N	
1	4/24/78	9	1		62	N	
1	4/24/78	10	1		62	N	
1	4/24/78	11	1		60	N	
1	7/16/78	1	1		67	N	
1	7/16/78	2	1		68	N	
1	7/16/78	3	1		67	N	
1	7/16/78	4	1		68	N	
1	7/16/78	5	1		69	Y	
1	7/16/78	6	1		64	N	
1	7/16/78	7	1		65	N	
1	7/16/78	8	1		67	N	
1	7/16/78	9	1		64	N	
1	7/16/78	10	1		69	N	
1	7/16/78	11	1		68	N	
1	1/5/79	1	1		78	Y	
1	1/5/79	2	1		75	N	
1	1/5/79	3	1		71	N	
1	1/5/79	4	1		71	N	
1	1/5/79	5	1		71	N	
1	1/5/79	6	1		71	N	
1	1/5/79	7	1		71	N	
1	1/5/79	8	1		71	N	
1	1/5/79	9	1		71	N	
1	1/5/79	10	1		75	N	
1	1/5/79	11	1		73	N	
1	4/7/79	1	1		64	Y	
1	4/7/79	2	1		60	N	
1	4/7/79	3	1		60	N	
1	4/7/79	4	1		60	N	
1	4/7/79	5	1		60	N	
1	4/7/79	6	1		60	N	
1	4/7/79	7	1		60	N	
1	4/7/79	8	1		60	N	
1	4/7/79	9	1		60	N	
1	4/7/79	10	1		60	N	
1	4/7/79	11	1		57	N	
1	7/1/79	1	1		64	Y	
1	7/1/79	2	1		62	N	
1	7/1/79	3	1		62	N	
1	7/1/79	4	1		62	N	
1	7/1/79	5	1		62	N	
1	7/1/79	6	1		62	N	
1	7/1/79	7	1		62	N	
1	7/1/79	8	1		62	N	
1	7/1/79	9	1		62	N	
1	7/1/79	10	1		62	N	
1	7/1/79	11	1		62	N	
1	10/8/79	1	1		72	N	
1	10/8/79	2	1		73	Y	
1	10/8/79	3	1		72	N	
1	10/8/79	4	1		72	N	
1	10/8/79	5	1		71	N	
1	10/8/79	6	1		72	N	
1	10/8/79	7	1		72	N	
1	10/8/79	8	1		72	N	
1	10/8/79	9	1		72	N	
1	10/8/79	10	1		72	N	
1	10/8/79	11	1		73	N	
1	1/9/80	1	1		73	Y	
1	1/9/80	2	1		70	N	
1	1/9/80	3	1		70	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	1/9/80	4	1		70	N	
1	1/9/80	5	1		70	N	
1	1/9/80	6	1		70	N	
1	1/9/80	7	1		70	N	
1	1/9/80	8	1		70	N	
1	1/9/80	9	1		70	N	
1	1/9/80	10	1		70	N	
1	1/9/80	11	1		68	N	
1	4/4/80	1	1		74	Y	
1	4/4/80	2	1		72	N	
1	4/4/80	3	1		70	N	
1	4/4/80	4	1		70	N	
1	4/4/80	5	1		70	N	
1	4/4/80	6	1		70	N	
1	4/4/80	7	1		70	N	
1	4/4/80	8	1		70	N	
1	4/4/80	9	1		70	N	
1	4/4/80	10	1		70	N	
1	4/4/80	11	1		69	N	
1	7/5/80	1	1		81	Y	
1	7/5/80	2	1		80	N	
1	7/5/80	3	1		80	N	
1	7/5/80	4	1		80	N	
1	7/5/80	5	1		80	N	
1	7/5/80	6	1		80	N	
1	7/5/80	7	1		80	N	
1	7/5/80	8	1		80	N	
1	7/5/80	9	1		80	N	
1	7/5/80	10	1		80	N	
1	7/5/80	11	1		80	N	
1	7/5/80	12	1		80	N	
1	10/26/80	1	1		75	Y	
1	10/26/80	2	1		75	N	
1	10/26/80	3	1		75	N	
1	10/26/80	4	1		75	N	
1	10/26/80	5	1		75	N	
1	10/26/80	6	1		75	N	
1	10/26/80	7	1		75	N	
1	10/26/80	8	1		75	N	
1	10/26/80	9	1		75	N	
1	10/26/80	10	1		75	N	
1	10/26/80	11	1		75	N	
1	10/26/80	12	1		75	N	
1	1/19/82	2	1		75	N	
1	1/19/82	3	1		74	N	
1	1/19/82	4	1		74	N	
1	1/19/82	5	1		75	N	
1	1/19/82	6	1		75	N	
1	1/19/82	7	1		75	N	
1	1/19/82	8	1		75	N	
1	1/19/82	9	1		75	N	
1	1/19/82	10	1		75	N	
1	4/6/82	1	1		60	Y	
1	4/6/82	2	1		57	N	
1	4/6/82	3	1		56	N	
1	4/6/82	4	1		56	N	
1	4/6/82	5	1		56	N	
1	4/6/82	6	1		56	N	
1	4/6/82	7	1		56	N	
1	4/6/82	8	1		56	N	
1	4/6/82	9	1		56	N	
1	4/6/82	10	1		56	N	
1	4/6/82	11	1		54	N	
1	7/13/82	1	1		70	N	
1	7/13/82	2	1		70	N	
1	7/13/82	3	1		70	N	
1	7/13/82	4	1		70	N	
1	7/13/82	5	1		70	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	7/13/82	6	1		70	N	
1	7/13/82	7	1		70	N	
1	7/13/82	8	1		70	N	
1	7/13/82	9	1		70	N	
1	7/13/82	10	1		70	N	
1	7/13/82	11	1		71	Y	
1	7/13/82	12	1		71	N	
1	10/16/82	1	1		71	Y	
1	10/16/82	2	1		71	N	
1	10/16/82	3	1		71	N	
1	10/16/82	4	1		71	N	
1	10/16/82	5	1		71	N	
1	10/16/82	6	1		71	N	
1	10/16/82	7	1		71	N	
1	10/16/82	8	1		71	N	
1	10/16/82	9	1		71	N	
1	10/16/82	10	1		71	N	
1	10/16/82	11	1		71	N	
1	10/16/82	12	1		71	N	
1	1/8/83	1	1		66	Y	
1	1/8/83	2	1		64	N	
1	1/8/83	3	1		64	N	
1	1/8/83	4	1		64	N	
1	1/8/83	5	1		64	N	
1	1/8/83	6	1		64	N	
1	1/8/83	7	1		64	N	
1	1/8/83	8	1		64	N	
1	1/8/83	9	1		64	N	
1	1/8/83	10	1		64	N	
1	1/8/83	11	1		62	N	
1	4/3/83	1	1		60	Y	
1	4/3/83	2	1		59	N	
1	4/3/83	3	1		59	N	
1	4/3/83	4	1		59	N	
1	4/3/83	5	1		59	N	
1	4/3/83	6	1		59	N	
1	4/3/83	7	1		59	N	
1	4/3/83	8	1		60	N	
1	4/3/83	9	1		60	N	
1	4/3/83	10	1		60	N	
1	4/3/83	11	1		58	N	
1	7/19/83	1	1		66	Y	
1	7/19/83	2	1		66	N	
1	7/19/83	3	1		66	N	
1	7/19/83	4	1		66	N	
1	7/19/83	5	1		66	N	
1	7/19/83	6	1		66	N	
1	7/19/83	7	1		65	N	
1	7/19/83	8	1		65	N	
1	7/19/83	9	1		66	N	
1	7/19/83	10	1		66	N	
1	7/19/83	11	1		66	N	
1	10/13/83	1	1		64	N	
1	10/13/83	2	1		64	N	
1	10/13/83	3	1		64	N	
1	10/13/83	4	1		64	N	
1	10/13/83	5	1		64	N	
1	10/13/83	6	1		64	N	
1	10/13/83	7	1		64	N	
1	10/13/83	8	1		64	N	
1	10/13/83	9	1		64	N	
1	10/13/83	10	1		64	N	
1	10/13/83	11	1		66	Y	
1	10/13/83	12	1		66	N	
1	2/11/84	1	1		72	Y	
1	2/11/84	2	1		68	N	
1	2/11/84	3	1		67	N	
1	2/11/84	4	1		67	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	2/11/84	5	1		67	N	
1	2/11/84	6	1		67	N	
1	2/11/84	7	1		66	N	
1	2/11/84	8	1		64	N	
1	2/11/84	9	1		64	N	
1	2/11/84	10	1		64	N	
1	2/11/84	11	1		63	N	
1	10/23/89	1	1		70.9	N	
1	10/23/89	2	1		71.2	N	
1	10/23/89	3	1		71.2	N	
1	10/23/89	4	1		71.3	N	
1	10/23/89	5	1		71.2	N	
1	10/23/89	6	1		71.3	N	
1	10/23/89	7	1		71.4	N	
1	10/23/89	8	1		71.5	N	
1	10/23/89	9	1		71.6	N	
1	10/23/89	10	1		71.7	N	
1	10/23/89	11	1		72.4	Y	
1	11/4/89	1	1		67.1	N	
1	11/4/89	2	1		67.3	N	
1	11/4/89	3	1		67.4	N	
1	11/4/89	4	1		67.3	N	
1	11/4/89	5	1		67.3	N	
1	11/4/89	6	1		67.3	N	
1	11/4/89	7	1		67.3	N	
1	11/4/89	8	1		67.3	N	
1	11/4/89	9	1		67.3	N	
1	11/4/89	10	1		67.4	N	
1	11/4/89	11	1		67.7	Y	
1	11/10/89	1	1		69.9	N	
1	11/10/89	2	1		70	N	
1	11/10/89	3	1		69.9	N	
1	11/10/89	4	1		69.9	N	
1	11/10/89	5	1		69.9	N	
1	11/10/89	6	1		69.9	N	
1	11/10/89	7	1		69.9	N	
1	11/10/89	8	1		69.9	N	
1	11/10/89	9	1		69.9	N	
1	11/10/89	10	1		69.9	N	
1	11/10/89	11	1		70.2	Y	
1	11/10/89	12	1			N	
1	11/18/89	1	1		71.8	Y	J
1	11/18/89	2	1		71.6	N	
1	11/18/89	3	1		71.5	N	
1	11/18/89	4	1		71.6	N	
1	11/18/89	5	1		71.5	N	
1	11/18/89	6	1		71.5	N	
1	11/18/89	7	1		71.5	N	
1	11/18/89	8	1		71.5	N	
1	11/18/89	9	1		71.5	N	
1	11/18/89	10	1		71.7	N	
1	11/18/89	11	1		71.7	N	
1	11/18/89	12	1			N	
1	11/24/89	1	1		74.2	Y	
1	11/24/89	2	1		73.6	N	
1	11/24/89	3	1		73.5	N	
1	11/24/89	4	1		73.5	N	
1	11/24/89	5	1		73.4	N	
1	11/24/89	6	1		73.4	N	
1	11/24/89	7	1		73.4	N	
1	11/24/89	8	1		73.4	N	
1	11/24/89	9	1		73.3	N	
1	11/24/89	10	1		73.3	N	
1	11/24/89	11	1		73.3	N	
1	12/1/89	1	1		71.4	Y	
1	12/1/89	2	1		70.9	N	
1	12/1/89	3	1		70.8	N	
1	12/1/89	4	1		70.8	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	12/1/89	5	1		70.8	N	
1	12/1/89	6	1		70.8	N	
1	12/1/89	7	1		70.8	N	
1	12/1/89	8	1		70.8	N	
1	12/1/89	9	1		70.8	N	
1	12/1/89	10	1		70.8	N	
1	12/1/89	11	1		70.6	N	
1	12/10/89	1	1		80.9	Y	J
1	12/10/89	2	1		79.4	N	
1	12/10/89	3	1		79.3	N	
1	12/10/89	4	1		78.8	N	
1	12/10/89	5	1		78.8	N	
1	12/10/89	6	1		78.8	N	
1	12/10/89	7	1		78.9	N	
1	12/10/89	8	1		78.6	N	
1	12/10/89	9	1		78.6	N	
1	12/10/89	10	1		78.5	N	
1	12/10/89	11	1		77.8	N	
1	12/10/89	12	1		77.8	N	
1	12/15/89	1	1		72.1	Y	J
1	12/15/89	2	1		71	N	
1	12/15/89	3	1		70.8	N	
1	12/15/89	4	1		70.7	N	
1	12/15/89	5	1		70.5	N	
1	12/15/89	6	1		70.4	N	
1	12/15/89	7	1		70.4	N	
1	12/15/89	8	1		70.4	N	
1	12/15/89	9	1		70.5	N	
1	12/15/89	10	1		70.6	N	
1	12/15/89	11	1		70	N	
1	12/15/89	12	1			N	
1	12/23/89	1	1		75.6	Y	
1	12/23/89	2	1		73.9	N	
1	12/23/89	3	1		73.5	N	
1	12/23/89	4	1		73.3	N	
1	12/23/89	5	1		73.1	N	
1	12/23/89	6	1		73	N	
1	12/23/89	7	1		72.9	N	
1	12/23/89	8	1		72.8	N	
1	12/23/89	9	1		72.7	N	
1	12/23/89	10	1		72.6	N	
1	12/23/89	11	1		71.7	N	
1	12/30/89	1	1		67.1	Y	J-890523512-20
1	12/30/89	2	1		66.1	N	
1	12/30/89	3	1		65.9	N	
1	12/30/89	4	1		65.9	N	
1	12/30/89	5	1		65.9	N	
1	12/30/89	6	1		65.7	N	
1	12/30/89	7	1		65.7	N	
1	12/30/89	8	1		65.7	N	
1	12/30/89	9	1		65.7	N	
1	12/30/89	10	1		65.7	N	
1	12/30/89	11	1		64.7	N	
1	12/30/89	12	1		64.7	N	
1	1/5/90	1	1		65.2	Y	J
1	1/5/90	2	1		64.9	N	
1	1/5/90	3	1		64.7	N	
1	1/5/90	4	1		64.7	N	
1	1/5/90	5	1		64.7	N	
1	1/5/90	6	1		64.7	N	
1	1/5/90	7	1		64.7	N	
1	1/5/90	8	1		64.7	N	
1	1/5/90	9	1		64.7	N	
1	1/5/90	10	1		64.7	N	
1	1/5/90	11	1		63.9	N	
1	1/13/90	1	1		69.2	Y	J-890523512-20
1	1/13/90	2	1		67.1	N	
1	1/13/90	3	1		66.8	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	1/13/90	4	1		66.9	N	
1	1/13/90	5	1		66.9	N	
1	1/13/90	6	1		66.8	N	
1	1/13/90	7	1		66.9	N	
1	1/13/90	8	1		66.9	N	
1	1/13/90	9	1		66.9	N	
1	1/13/90	10	1		66.9	N	
1	1/13/90	11	1		65.6	N	
1	1/19/90	1	1		67.2	Y	
1	1/19/90	2	1		65.3	N	
1	1/19/90	3	1		65.1	N	
1	1/19/90	4	1		65.1	N	
1	1/19/90	5	1		65.1	N	
1	1/19/90	6	1		65	N	
1	1/19/90	7	1		65	N	
1	1/19/90	8	1		65	N	
1	1/19/90	9	1		65	N	
1	1/19/90	10	1		64.9	N	
1	1/19/90	11	1		63.4	N	J
1	1/26/90	1	1		68.5	Y	J
1	1/26/90	2	1		66.4	N	
1	1/26/90	3	1		66.1	N	
1	1/26/90	4	1		66.2	N	
1	1/26/90	5	1		66.2	N	
1	1/26/90	6	1		66.2	N	
1	1/26/90	7	1		66.3	N	
1	1/26/90	8	1		66.2	N	
1	1/26/90	9	1		66.2	N	
1	1/26/90	10	1		66.4	N	
1	1/26/90	11	1		64.9	N	
1	2/2/90	1	1		69.9	Y	J
1	2/2/90	2	1		67.3	N	
1	2/2/90	3	1		66.9	N	
1	2/2/90	4	1		66.8	N	
1	2/2/90	5	1		66.6	N	
1	2/2/90	6	1		66.5	N	
1	2/2/90	7	1		66.4	N	
1	2/2/90	8	1		66.4	N	
1	2/2/90	9	1		66.4	N	
1	2/2/90	10	1		66.3	N	
1	2/2/90	11	1		64.6	N	
1	2/5/90	2	1		68	Y	
1	2/5/90	3	1		66.2	N	
1	2/5/90	4	1		66	N	
1	2/5/90	5	1		66.1	N	
1	2/5/90	6	1		66.2	N	
1	2/5/90	7	1		66.2	N	
1	2/5/90	8	1		66.3	N	
1	2/5/90	9	1		66.1	N	
1	2/5/90	10	1		63.5	N	
1	2/5/90	11	1		65	N	
1	2/26/90	1	1		68.7	Y	J
1	2/26/90	2	1		65.8	N	
1	2/26/90	3	1		65.5	N	
1	2/26/90	4	1		65.4	N	
1	2/26/90	5	1		65.2	N	
1	2/26/90	6	1		65.1	N	
1	2/26/90	7	1		65.1	N	
1	2/26/90	8	1		65.2	N	
1	2/26/90	9	1		65.4	N	
1	2/26/90	10	1		65.3	N	
1	2/26/90	11	1		63.5	N	
1	2/26/90	12	1			N	
1	3/2/90	1	1		65.9	Y	J-2E-OP-020
1	3/2/90	2	1		63	N	
1	3/2/90	3	1		63	N	
1	3/2/90	4	1		63.1	N	
1	3/2/90	5	1		63.3	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	3/2/90	6	1		63.5	N	
1	3/2/90	7	1		63.6	N	
1	3/2/90	8	1		63.7	N	
1	3/2/90	9	1		63.7	N	
1	3/2/90	10	1		61.8	N	
1	3/2/90	11	1			N	
1	4/7/90	1	1		66	Y	
1	4/7/90	2	1		63	N	J-2E-OP-020
1	4/7/90	3	1		63	N	
1	4/7/90	4	1		63	N	
1	4/7/90	5	1		63	N	
1	4/7/90	6	1		63	N	
1	4/7/90	7	1		63	N	
1	4/7/90	8	1		63	N	
1	4/7/90	9	1		63	N	
1	4/7/90	10	1		63	N	
1	4/7/90	11	1		61	N	
1	5/13/90	1	1		65.1	N	J-Type 2E-OP-020
1	5/13/90	2	1		65.6	Y	
1	5/13/90	3	1		65.4	N	
1	5/13/90	4	1		65.4	N	
1	5/13/90	5	1		65.4	N	
1	5/13/90	6	1		65.3	N	
1	5/13/90	7	1		65.3	N	
1	5/13/90	8	1		65.2	N	
1	5/13/90	9	1		65.2	N	
1	5/13/90	10	1		65.1	N	
1	5/13/90	11	1		64.4	N	
1	6/1/90	1	1		65.6	Y	
1	6/1/90	2	1		64.4	N	
1	6/1/90	3	1		64.4	N	
1	6/1/90	4	1		64.5	N	
1	6/1/90	5	1		64.6	N	
1	6/1/90	6	1		64.7	N	
1	6/1/90	7	1		64.7	N	
1	6/1/90	8	1		64.8	N	
1	6/1/90	9	1		64.9	N	
1	6/1/90	10	1		64.7	N	
1	6/1/90	11	1		63.8	N	
1	7/9/90	1	1		66.3	Y	
1	7/9/90	2	1		65.4	N	
1	7/9/90	3	1		65.5	N	
1	7/9/90	4	1		65.4	N	
1	7/9/90	5	1		65.2	N	
1	7/9/90	6	1		65.2	N	
1	7/9/90	7	1		65.1	N	
1	7/9/90	8	1		65.1	N	
1	7/9/90	9	1		65.1	N	
1	7/9/90	10	1		65.1	N	
1	7/9/90	11	1		64.9	N	
1	8/3/90	1	1		64.1	N	J
1	8/3/90	2	1		64.2	N	
1	8/3/90	3	1		64.3	N	
1	8/3/90	4	1		64.5	N	
1	8/3/90	5	1		64.6	N	
1	8/3/90	6	1		64.6	N	
1	8/3/90	7	1		64.9	N	
1	8/3/90	8	1		65	N	
1	8/3/90	9	1		65.1	N	
1	8/3/90	10	1		65.1	N	
1	8/3/90	11	1		65.6	Y	
1	9/10/90	1	1		69.9	N	J
1	9/10/90	2	1		69.9	N	
1	9/10/90	3	1		75.3	N	
1	9/10/90	4	1		70	N	
1	9/10/90	5	1		71.2	N	
1	9/10/90	6	1		69.9	N	
1	9/10/90	7	1		69.9	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	9/10/90	8	1		69.9	N	
1	9/10/90	9	1		69.9	N	
1	9/10/90	10	1		70	N	
1	9/10/90	11	1		70.1	N	
1	9/10/90	12	1		70.4	N	
1	10/9/90	1	1			N	No Data requested recheck 10/10/90
1	10/10/90	1	1		72	N	Rechecked
1	10/10/90	2	1		72	N	
1	10/10/90	3	1		72	N	
1	10/10/90	4	1		72	N	
1	10/10/90	5	1		72	N	
1	10/10/90	6	1		72	N	
1	10/10/90	7	1		73	Y	
1	10/10/90	8	1		73	N	
1	10/10/90	9	1		73	N	
1	10/10/90	10	1		73	N	
1	10/10/90	11	1		71	N	
1	10/10/90	12	1			N	
1	10/22/90	1	1		68.6	N	J-890523512-20
1	10/22/90	2	1		69.4	N	
1	10/22/90	3	1		69.4	N	
1	10/22/90	4	1		69.4	N	
1	10/22/90	5	1		69.4	N	
1	10/22/90	6	1		69.4	N	
1	10/22/90	7	1		69	N	
1	10/22/90	8	1		69.4	N	
1	10/22/90	9	1		69.4	N	
1	10/22/90	10	1		69.6	N	
1	10/22/90	11	1		70.3	Y	
1	10/26/90	1	1		67.9	N	J-890523512-20
1	10/26/90	2	1		68.3	N	
1	10/26/90	3	1		68.2	N	
1	10/26/90	4	1		67.9	N	
1	10/26/90	5	1		67.8	N	
1	10/26/90	6	1		67.8	N	
1	10/26/90	7	1		67.9	N	
1	10/26/90	8	1		68	N	
1	10/26/90	9	1		68.2	N	
1	10/26/90	10	1		68.6	N	
1	10/26/90	11	1		69.6	Y	
1	10/29/90	1	1		68.2	N	J-890523512-20
1	10/29/90	2	1		68.7	N	
1	10/29/90	3	1		68.8	N	
1	10/29/90	4	1		68.8	N	
1	10/29/90	5	1		68.7	N	
1	10/29/90	6	1		68.7	N	
1	10/29/90	7	1		68.8	N	
1	10/29/90	8	1		68.8	N	
1	10/29/90	9	1		68.9	N	
1	10/29/90	10	1		69.1	N	
1	10/29/90	11	1		69.8	N	
1	11/5/90	1	1		66.7	N	J 890523512-20
1	11/5/90	2	1		67.3	N	
1	11/5/90	3	1		67.3	N	
1	11/5/90	4	1		67.3	N	
1	11/5/90	5	1		67.3	N	
1	11/5/90	6	1		67.4	N	
1	11/5/90	7	1		67.5	N	
1	11/5/90	8	1		67.6	N	
1	11/5/90	9	1		67.7	N	
1	11/5/90	10	1		67.7	N	
1	11/5/90	11	1		68.4	Y	
1	11/12/90	1	1		70.2	N	2E-OP-021
1	11/12/90	2	1		70.1	N	
1	11/12/90	3	1		70	N	
1	11/12/90	4	1		70	N	
1	11/12/90	5	1		70.1	N	
1	11/12/90	6	1		70.2	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	11/12/90	7	1		70.3	N	
1	11/12/90	8	1		70.3	N	
1	11/12/90	9	1		70.4	N	
1	11/12/90	10	1		70.5	N	
1	11/12/90	11	1		70.9	Y	
1	11/12/90	12	1			N	TC #12 O/S
1	11/18/90	1	1		69.1	N	J-HH-99A-J 890523512-20
1	11/18/90	2	1		69.1	N	
1	11/18/90	3	1		69	N	
1	11/18/90	4	1		69.1	N	
1	11/18/90	5	1		69.1	N	
1	11/18/90	6	1		69.1	N	
1	11/18/90	7	1		69.1	N	
1	11/18/90	8	1		69.3	N	
1	11/18/90	9	1		69.4	N	
1	11/18/90	10	1		69.4	N	
1	11/18/90	11	1		69.7	Y	
1	11/25/90	1	1		68.2	N	J-2E-OP-021
1	11/25/90	2	1		69.1	N	
1	11/25/90	3	1		68.9	N	
1	11/25/90	4	1		67.8	N	
1	11/25/90	5	1		69	N	
1	11/25/90	6	1		69.1	N	
1	11/25/90	7	1		69.1	N	
1	11/25/90	8	1		69.2	N	
1	11/25/90	9	1		70.9	Y	
1	11/25/90	11	1		69.2	N	
1	11/25/90	12	1		67.1	N	
1	12/5/90	1	1		68.5	Y	J 890523512-20
1	12/5/90	2	1		67.9	N	
1	12/5/90	3	1		67.7	N	
1	12/5/90	4	1		67.7	N	
1	12/5/90	5	1		67.5	N	
1	12/5/90	6	1		67.4	N	
1	12/5/90	7	1		67	N	
1	12/5/90	8	1		66.9	N	
1	12/5/90	9	1		67	N	
1	12/5/90	10	1		67.1	N	
1	12/5/90	11	1		66.7	N	
1	12/11/90	1	1		68	Y	J 890423320-11
1	12/11/90	2	1		67.3	N	
1	12/11/90	3	1		67.2	N	
1	12/11/90	4	1		67.2	N	
1	12/11/90	5	1		67.1	N	
1	12/11/90	6	1		67.1	N	
1	12/11/90	7	1		67.1	N	
1	12/11/90	8	1		67.1	N	
1	12/11/90	9	1		67.1	N	
1	12/11/90	10	1		67.2	N	
1	12/11/90	11	1		66.7	N	
1	12/15/90	1	1		66.9	N	HH-99A-J
1	12/15/90	2	1		66.2	N	
1	12/15/90	3	1		66.2	N	
1	12/15/90	4	1		66.4	N	
1	12/15/90	5	1		66.8	N	
1	12/15/90	6	1		67.2	N	
1	12/15/90	7	1		67.4	N	
1	12/15/90	8	1		67.6	N	
1	12/15/90	9	1		67.8	Y	
1	12/15/90	10	1		67.8	N	
1	12/15/90	11	1		67.2	N	
1	12/22/90	1	1		68	Y	J 890423320-11
1	12/22/90	2	1		68	N	
1	12/22/90	3	1		67	N	
1	12/22/90	4	1		67	N	
1	12/22/90	5	1		67	N	
1	12/22/90	6	1		66	N	
1	12/22/90	7	1		67	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	12/22/90	8	1		67	N	
1	12/22/90	9	1		67	N	
1	12/22/90	10	1		66	N	
1	12/22/90	11	1		67	N	
1	12/31/90	1	1		67.5	Y	J-2E-OP-021
1	12/31/90	2	1		66.3	N	
1	12/31/90	3	1		66.3	N	
1	12/31/90	4	1		66.3	N	
1	12/31/90	5	1		66.3	N	
1	12/31/90	6	1		66.3	N	
1	12/31/90	7	1		66.3	N	
1	12/31/90	8	1		66.3	N	
1	12/31/90	9	1		66.4	N	
1	12/31/90	10	1		66.4	N	
1	12/31/90	11	1		66.5	N	
1	1/6/91	1	1		66	Y	J
1	1/6/91	2	1		65	N	
1	1/6/91	3	1		65	N	
1	1/6/91	4	1		65	N	
1	1/6/91	5	1		65	N	
1	1/6/91	6	1		65	N	
1	1/6/91	7	1		65	N	
1	1/6/91	8	1		65	N	
1	1/6/91	9	1		65	N	
1	1/6/91	10	1		65	N	
1	1/6/91	11	1		63	N	
1	1/13/91	1	1		66.2	Y	J 890423320-11
1	1/13/91	2	1		64.4	N	
1	1/13/91	3	1		64.1	N	
1	1/13/91	4	1		64.1	N	
1	1/13/91	5	1		64.2	N	
1	1/13/91	6	1		64.2	N	
1	1/13/91	7	1		64.2	N	
1	1/13/91	8	1		64.2	N	
1	1/13/91	9	1		64.2	N	
1	1/13/91	10	1		64.2	N	
1	1/13/91	11	1		62.8	N	
1	1/19/91	1	1		67.2	Y	J HH99A-J
1	1/19/91	2	1		64.8	N	
1	1/19/91	3	1		64	N	
1	1/19/91	4	1		63.9	N	
1	1/19/91	5	1		64.3	N	
1	1/19/91	6	1		64.4	N	
1	1/19/91	7	1		64.6	N	
1	1/19/91	8	1		64.8	N	
1	1/19/91	9	1		64.9	N	
1	1/19/91	10	1		64.9	N	
1	1/19/91	11	1		63.2	N	
1	1/29/91	1	1		64.9	Y	J HH-99A 890523512-20
1	1/29/91	2	1		62.3	N	
1	1/29/91	3	1		62.2	N	
1	1/29/91	4	1		62.3	N	
1	1/29/91	5	1		62.4	N	
1	1/29/91	6	1		62.5	N	
1	1/29/91	7	1		62.5	N	
1	1/29/91	8	1		62.5	N	
1	1/29/91	9	1		62.5	N	
1	1/29/91	10	1		62.3	N	
1	1/29/91	11	1		60.4	N	
1	2/3/91	1	1		63	Y	J Ser#890523512-47
1	2/3/91	2	1		61	N	
1	2/3/91	3	1		60	N	
1	2/3/91	4	1		60	N	
1	2/3/91	5	1		60	N	
1	2/3/91	6	1		60	N	
1	2/3/91	7	1		60	N	
1	2/3/91	8	1		60	N	
1	2/3/91	9	1		60	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	2/3/91	10	1		60	N	
1	2/3/91	11	1		58	N	
1	2/9/91	1	1		64.2	Y	J-890523512-47
1	2/9/91	2	1		61.5	N	
1	2/9/91	3	1		61.2	N	
1	2/9/91	4	1		61.2	N	
1	2/9/91	5	1		61.3	N	
1	2/9/91	6	1		61.3	N	
1	2/9/91	7	1		61.3	N	
1	2/9/91	8	1		61.2	N	
1	2/9/91	9	1		61.2	N	
1	2/9/91	10	1		61	N	
1	2/9/91	11	1		58.7	N	
1	2/16/91	1	1		62	Y	
1	2/16/91	2	1		59.2	N	
1	2/16/91	3	1		58.6	N	
1	2/16/91	4	1		58.5	N	
1	2/16/91	5	1		58.7	N	
1	2/16/91	6	1		58.8	N	
1	2/16/91	7	1		58.8	N	
1	2/16/91	8	1		59	N	
1	2/16/91	9	1		59.1	N	
1	2/16/91	10	1		59	N	
1	2/16/91	11	1		56.7	N	
1	2/23/91	1	1		61.9	Y	J 890523512-47 TC#12 o/s
1	2/23/91	2	1		59.3	N	
1	2/23/91	3	1		58.6	N	
1	2/23/91	4	1		58.5	N	
1	2/23/91	5	1		58.8	N	
1	2/23/91	6	1		58.9	N	
1	2/23/91	7	1		59	N	
1	2/23/91	8	1		59.2	N	
1	2/23/91	9	1		59.3	N	
1	2/23/91	10	1		59.2	N	
1	2/23/91	11	1		57	N	
1	3/3/91	1	1		61.7	Y	J 890523512-47
1	3/3/91	2	1		58.9	N	
1	3/3/91	3	1		58.5	N	
1	3/3/91	4	1		58.5	N	
1	3/3/91	5	1		58.5	N	
1	3/3/91	6	1		58.4	N	
1	3/3/91	7	1		58.4	N	
1	3/3/91	8	1		58.4	N	
1	3/3/91	9	1		58.3	N	
1	3/3/91	10	1		58.1	N	
1	3/3/91	11	1		55.9	N	
1	3/9/91	1	1		65.7	Y	2E-OP-020
1	3/9/91	2	1		63	N	
1	3/9/91	3	1		62.6	N	
1	3/9/91	4	1		62.6	N	
1	3/9/91	5	1		62.6	N	
1	3/9/91	6	1		62.7	N	
1	3/9/91	7	1		62.7	N	
1	3/9/91	8	1		62.7	N	
1	3/9/91	9	1		62.6	N	
1	3/9/91	10	1		60.3	N	
1	3/17/91	1	1		63.2	Y	J 2E-OP-021
1	3/17/91	2	1		60.6	N	
1	3/17/91	3	1		60.4	N	
1	3/17/91	4	1		60.5	N	
1	3/17/91	5	1		60.7	N	
1	3/17/91	6	1		60.8	N	
1	3/17/91	7	1		61	N	
1	3/17/91	8	1		61.2	N	
1	3/17/91	9	1		61.4	N	
1	3/17/91	10	1		61.3	N	
1	3/17/91	11	1		59.1	N	
1	3/23/91	1	1		64.1	Y	J 2E-OP-021

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	3/23/91	2	1		64.1	N	
1	3/23/91	3	1		61.1	N	
1	3/23/91	4	1		61.1	N	
1	3/23/91	5	1		61.1	N	
1	3/23/91	6	1		61.1	N	
1	3/23/91	7	1		61.1	N	
1	3/23/91	8	1		61.1	N	
1	3/23/91	9	1		61.1	N	
1	3/23/91	10	1		61	N	
1	3/23/91	11	1		58.9	N	
1	3/30/91	1	1		61.8	Y	J 89052312-20
1	3/30/91	2	1		59.1	N	
1	3/30/91	3	1		59	N	
1	3/30/91	4	1		59.2	N	
1	3/30/91	5	1		59.4	N	
1	3/30/91	6	1		59.6	N	
1	3/30/91	7	1		59.8	N	
1	3/30/91	8	1		60	N	
1	3/30/91	9	1		60.2	N	
1	3/30/91	10	1		60.2	N	
1	3/30/91	11	1		58.3	N	
1	4/7/91	1	1		65.1	Y	J 890423320-11
1	4/7/91	2	1		62.5	N	
1	4/7/91	3	1		62.1	N	
1	4/7/91	4	1		62	N	
1	4/7/91	5	1		62	N	
1	4/7/91	6	1		61.9	N	
1	4/7/91	7	1		61.8	N	
1	4/7/91	8	1		61.6	N	
1	4/7/91	9	1		61.9	N	
1	4/7/91	10	1		61.2	N	
1	4/7/91	11	1		59.2	N	
1	4/14/91	1	1		64.3	Y	J 890523512-20
1	4/14/91	2	1		62.2	N	
1	4/14/91	3	1		61.9	N	
1	4/14/91	4	1		61.8	N	
1	4/14/91	5	1		61.7	N	
1	4/14/91	6	1		61.5	N	
1	4/14/91	7	1		61.4	N	
1	4/14/91	8	1		61.2	N	
1	4/14/91	9	1		61.1	N	
1	4/14/91	10	1		60.8	N	
1	4/14/91	11	1		59	N	
1	4/20/91	1	1		61	N	J 890523512-20
1	4/20/91	2	1		60.5	N	
1	4/20/91	3	1		62.4	Y	
1	4/20/91	4	1		60	N	
1	4/20/91	5	1		60.4	N	
1	4/20/91	6	1		59.9	N	
1	4/20/91	7	1		59.8	N	
1	4/20/91	8	1		59.8	N	
1	4/20/91	9	1		59.7	N	
1	4/20/91	10	1		59.7	N	
1	4/20/91	11	1		59.7	N	
1	4/20/91	12	1		59.3	N	
1	4/28/91	1	1		61.9	N	J 890523512-20
1	4/28/91	2	1		61.7	N	
1	4/28/91	3	1		64	Y	
1	4/28/91	4	1		61.6	N	
1	4/28/91	5	1		62.2	N	
1	4/28/91	6	1		61.7	N	
1	4/28/91	7	1		61.8	N	
1	4/28/91	8	1		61.7	N	
1	4/28/91	9	1		61.8	N	
1	4/28/91	10	1		61.7	N	
1	4/28/91	11	1		61.7	N	
1	4/28/91	12	1		61.2	N	
1	5/5/91	1	1		63.7	Y	J 890523512-20

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	5/5/91	2	1		61.7	N	
1	5/5/91	3	1		61.4	N	
1	5/5/91	4	1		61.4	N	
1	5/5/91	5	1		61.4	N	
1	5/5/91	6	1		61.3	N	
1	5/5/91	8	1		61.2	N	
1	5/5/91	9	1		61.2	N	
1	5/5/91	10	1		61.1	N	
1	5/5/91	11	1		59.5	N	
1	5/12/91	1	1		62.5	Y	J
1	5/12/91	2	1		60.3	N	
1	5/12/91	3	1		60.1	N	
1	5/12/91	4	1		60.1	N	
1	5/12/91	5	1		60.1	N	
1	5/12/91	6	1		60.2	N	
1	5/12/91	7	1		60.3	N	
1	5/12/91	8	1		60.4	N	
1	5/12/91	9	1		60.5	N	
1	5/12/91	10	1		60.5	N	
1	5/18/91	1	1		64.6	Y	J Keithley 872 2E-OP-020
1	5/18/91	2	1		62.7	N	
1	5/18/91	3	1		62.4	N	
1	5/18/91	4	1		62.3	N	
1	5/18/91	5	1		62.3	N	
1	5/18/91	6	1		62.3	N	
1	5/18/91	7	1		62.3	N	
1	5/18/91	8	1		62.3	N	
1	5/18/91	9	1		62.3	N	
1	5/18/91	10	1		62.1	N	
1	5/18/91	11	1		60.9	N	
1	5/25/91	1	1			N	2E-OP-021 o/s wo#04756
1	6/1/91	1	1		63.4	Y	J 890423320-42
1	6/1/91	2	1		61.8	N	
1	6/1/91	3	1		61.9	N	
1	6/1/91	4	1		61.3	N	
1	6/1/91	5	1		61.2	N	
1	6/1/91	6	1		61.1	N	
1	6/1/91	7	1		61	N	
1	6/1/91	8	1		61	N	
1	6/1/91	9	1		61	N	
1	6/1/91	10	1		61	N	
1	6/1/91	11	1		61	N	
1	6/8/91	1	1		63.4	Y	J 890523512-20
1	6/8/91	2	1		61.8	N	
1	6/8/91	3	1		61.8	N	
1	6/8/91	4	1		61.5	N	
1	6/8/91	5	1		61.5	N	
1	6/8/91	6	1		61.5	N	
1	6/8/91	7	1		61.5	N	
1	6/8/91	8	1		61.7	N	
1	6/8/91	9	1		61.9	N	
1	6/8/91	10	1		61.9	N	
1	6/8/91	11	1		61.3	N	
1	6/15/91	1	1		64.1	Y	J 2E-OP-021
1	6/15/91	2	1		62.7	N	
1	6/15/91	3	1		62.5	N	
1	6/15/91	4	1		62.4	N	
1	6/15/91	5	1		62.4	N	
1	6/15/91	6	1		62.5	N	
1	6/15/91	7	1		62.4	N	
1	6/15/91	8	1		62.5	N	
1	6/15/91	9	1		62.5	N	
1	6/15/91	10	1		62.5	N	
1	6/15/91	11	1		61.8	N	
1	6/23/91	1	1		65.6	Y	J 2E-OP-021
1	6/23/91	2	1		64.4	N	
1	6/23/91	3	1		64.1	N	
1	6/23/91	4	1		64	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	6/23/91	5	1		64	N	
1	6/23/91	6	1		64	N	
1	6/23/91	7	1		63.9	N	
1	6/23/91	8	1		64	N	
1	6/23/91	9	1		64	N	
1	6/23/91	10	1		64	N	
1	6/23/91	11	1		63.4	N	
1	6/29/91	2	1		62.8	N	J 890423320-42 TC#12NG
1	6/29/91	3	1		62.7	N	
1	6/29/91	4	1		62.8	N	
1	6/29/91	5	1		62.8	N	
1	6/29/91	6	1		62.8	N	
1	6/29/91	7	1		62.8	N	
1	6/29/91	8	1		62.7	N	
1	6/29/91	9	1		62.7	N	
1	6/29/91	10	1		62.6	N	
1	6/29/91	11	1		62.1	N	
1	6/29/91	1	1		64.4	Y	
1	6/29/91	2	1		62.8	N	
1	6/29/91	3	1		62.8	N	
1	6/29/91	4	1		62.7	N	
1	6/29/91	5	1		62.8	N	
1	6/29/91	6	1		62.8	N	
1	6/29/91	7	1		62.8	N	
1	6/29/91	8	1		62.7	N	
1	6/29/91	9	1		62.7	N	
1	6/29/91	10	1		62.6	N	
1	6/29/91	11	1		62.1	N	
1	7/6/91	1	1		64.4	Y	
1	7/6/91	2	1		63.4	N	J 910126143-42
1	7/6/91	3	1		63.3	N	
1	7/6/91	4	1		62.8	N	
1	7/6/91	5	1		62.8	N	
1	7/6/91	6	1		62.8	N	
1	7/6/91	7	1		63.2	N	
1	7/6/91	8	1		63.4	N	
1	7/6/91	9	1		63.6	N	
1	7/6/91	10	1		63.7	N	
1	7/6/91	11	1		63.5	N	
1	7/13/91	1	1		64.4	Y	
1	7/13/91	2	1		63.4	N	J 910126143-42
1	7/13/91	3	1		63.5	N	
1	7/13/91	4	1		63.5	N	
1	7/13/91	5	1		63.4	N	
1	7/13/91	6	1		63.2	N	
1	7/13/91	7	1		63.3	N	
1	7/13/91	8	1		63.4	N	
1	7/13/91	9	1		63.6	N	
1	7/13/91	10	1		63.7	N	
1	7/13/91	11	1		63.5	N	
1	7/13/91	1	1		64.4	Y	
1	7/13/91	2	1		63.4	N	J 910126143-42
1	7/13/91	3	1		63.5	N	
1	7/13/91	4	1		63.5	N	
1	7/13/91	5	1		63.4	N	
1	7/13/91	6	1		63.2	N	
1	7/13/91	7	1		63.3	N	
1	7/13/91	8	1		63.4	N	
1	7/13/91	9	1		63.6	N	
1	7/13/91	10	1		63.7	N	
1	7/13/91	11	1		63.5	N	
1	7/13/91	1	1		64.4	Y	
1	7/13/91	2	1		63.4	N	J 910126143-42
1	7/13/91	3	1		63.5	N	
1	7/13/91	4	1		63.5	N	
1	7/13/91	5	1		63.4	N	
1	7/13/91	6	1		63.2	N	
1	7/13/91	7	1		63.3	N	
1	7/13/91	8	1		63.4	N	
1	7						

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	7/31/91	7	1		63.3	N	
1	7/31/91	8	1		63.5	N	
1	7/31/91	9	1		63.7	N	
1	7/31/91	10	1		63.7	N	
1	7/31/91	11	1		63.5	N	
1	8/3/91	1	1		64.8	Y	J 910126143-14
1	8/3/91	2	1		64.7	N	
1	8/3/91	3	1		64.6	N	
1	8/3/91	4	1		64.3	N	
1	8/3/91	5	1		64.2	N	
1	8/3/91	6	1		64.2	N	
1	8/3/91	7	1		64	N	
1	8/3/91	8	1		63.9	N	
1	8/3/91	9	1		63.3	N	
1	8/3/91	10	1		63.8	N	
1	8/3/91	11	1		64	N	
1	8/10/91	1	1		67	Y	J 890523512-20
1	8/10/91	2	1		67	N	
1	8/10/91	3	1		67	N	
1	8/10/91	4	1		67	N	
1	8/10/91	5	1		67	N	
1	8/10/91	6	1		67	N	
1	8/10/91	7	1		67	N	
1	8/10/91	8	1		67	N	
1	8/10/91	9	1		67	N	
1	8/10/91	10	1		67	N	
1	8/10/91	11	1		67	N	
1	8/18/91	3	1		63.7	N	J 890523512-20
1	8/18/91	4	1		63.7	N	
1	8/18/91	5	1		63.8	N	
1	8/18/91	6	1		63.9	N	
1	8/18/91	7	1		64.1	N	
1	8/18/91	8	1		64.3	N	
1	8/18/91	9	1		64.4	N	
1	8/18/91	10	1		64.7	N	
1	8/18/91	11	1		65.3	Y	
1	8/18/91	1	2		66.6	N	J 890523512-20
1	8/24/91	1	1		67.7	N	J 890523512-2
1	8/24/91	2	1		67.8	Y	
1	8/24/91	3	1		67.8	Y	
1	8/24/91	4	1		67.5	Y	
1	8/24/91	5	1		67.4	Y	
1	8/24/91	6	1		67.3	Y	
1	8/24/91	7	1		67.2	Y	
1	8/24/91	8	1		67.1	Y	
1	8/24/91	9	1		67	Y	
1	8/24/91	10	1		67.1	Y	
1	8/24/91	11	1		67.5	Y	
1	8/24/91	12	1			Y	
1	8/24/91	13	1			Y	
1	8/31/91	1	1		66.2	N	J-890423320-42
1	8/31/91	2	1		66.9	Y	
1	8/31/91	3	1		66.5	N	
1	8/31/91	4	1		66.5	N	
1	8/31/91	5	1		66.8	N	
1	8/31/91	6	1		66.7	N	
1	8/31/91	7	1		66.5	N	
1	8/31/91	8	1		66.4	N	
1	8/31/91	9	1		66.2	N	
1	8/31/91	10	1		66.1	N	
1	8/31/91	11	1		65.3	N	
1	9/8/91	1	1		66.2	N	J-890423320-42
1	9/8/91	2	1		66.9	Y	
1	9/8/91	3	1		66.5	N	
1	9/8/91	4	1		66.5	N	
1	9/8/91	5	1		66.5	N	
1	9/8/91	6	1		66.7	N	
1	9/8/91	7	1		66.5	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	9/8/91	8	1		66.5	N	
1	9/8/91	9	1		66.4	N	
1	9/8/91	10	1		66.2	N	
1	9/8/91	11	1		66.2	N	
1	9/8/91	12	1		66	N	
1	9/15/91	1	1		67.5	N	J-910126143-75
1	9/15/91	2	1		68.3	N	
1	9/15/91	3	1		68.3	N	
1	9/15/91	4	1		68.3	N	
1	9/15/91	5	1		68.5	N	
1	9/15/91	6	1		68.4	N	
1	9/15/91	7	1		68.4	N	
1	9/15/91	8	1		68.4	N	
1	9/15/91	9	1		68.4	N	
1	9/15/91	10	1		68.5	N	
1	9/15/91	11	1		69.6	Y	
1	9/21/91	1	1		65.9	N	J-910126143-75
1	9/21/91	2	1		66.8	N	
1	9/21/91	3	1		66.7	N	
1	9/21/91	4	1		66.7	N	
1	9/21/91	5	1		66.8	N	
1	9/21/91	6	1		66.9	N	
1	9/21/91	7	1		67.2	N	
1	9/21/91	8	1		67.5	N	
1	9/21/91	9	1		67.8	N	
1	9/21/91	10	1		68.1	N	
1	9/21/91	11	1		69.5	Y	
1	9/28/91	1	1		68.5	N	J-KEITHLEY 872 #T1-059
1	9/28/91	2	1		69.5	N	
1	9/28/91	3	1		69.5	N	
1	9/28/91	4	1		69.4	N	
1	9/28/91	5	1		69.6	N	
1	9/28/91	6	1		69.7	N	
1	9/28/91	7	1		69.8	N	
1	9/28/91	8	1		69.9	N	
1	9/28/91	9	1		70	N	
1	9/28/91	10	1		70.2	N	
1	9/28/91	11	1		71.1	Y	
1	10/5/91	1	1		68.8	N	J-910126143-42
1	10/5/91	2	1		69.4	N	
1	10/5/91	3	1		69.5	N	
1	10/5/91	4	1		69.6	N	
1	10/5/91	5	1		69.6	N	
1	10/5/91	6	1		69.7	N	
1	10/5/91	7	1		69.7	N	
1	10/5/91	8	1		69.7	N	
1	10/5/91	9	1		69.8	N	
1	10/5/91	10	1		69.8	N	
1	10/5/91	11	1		70.8	Y	
1	10/12/91	1	1		67	N	J-TI023
1	10/12/91	2	1		67	N	
1	10/12/91	3	1		67	N	
1	10/12/91	4	1		67	N	
1	10/12/91	5	1		67	N	
1	10/12/91	6	1		67	N	
1	10/12/91	7	1		68	N	
1	10/12/91	8	1		68	N	
1	10/12/91	9	1		68	N	
1	10/12/91	10	1		69	N	
1	10/12/91	11	1		70	Y	
1	10/19/91	2	1		68	N	
1	10/19/91	3	1		68	N	
1	10/19/91	4	1		68	N	
1	10/19/91	5	1		68.1	N	
1	10/19/91	6	1		68.2	N	
1	10/19/91	7	1		68.2	N	
1	10/19/91	8	1		68.3	N	
1	10/19/91	9	1		68.4	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	10/19/91	10	1		68.7	N	
1	10/19/91	11	1		69.6	Y	
1	10/27/91	1	1			N	J-3
1	11/2/91	1	1		67	N	J-890523512-47
1	11/2/91	2	1		67	N	
1	11/2/91	3	1		67	N	
1	11/2/91	4	1		67	N	
1	11/2/91	5	1		67	N	
1	11/2/91	6	1		67	N	
1	11/2/91	7	1		67	N	
1	11/2/91	8	1		68	N	
1	11/2/91	9	1		68	N	
1	11/2/91	10	1		68	N	
1	11/2/91	11	1		69	Y	
1	11/9/91	1	1		68	Y	J-890523512-47, TC #12 O/S
1	11/9/91	2	1		68	N	
1	11/9/91	3	1		68	N	
1	11/9/91	4	1		68	N	
1	11/9/91	5	1		68	N	
1	11/9/91	6	1		68	N	
1	11/9/91	7	1		68	N	
1	11/9/91	8	1		68	N	
1	11/9/91	9	1		68	N	
1	11/9/91	10	1		68	N	
1	11/9/91	11	1		68	N	
1	11/17/91	1	1			N	NO READINGS O/S J-3 ISSUED
1	11/24/91	1	1			N	NO READINGS
1	12/1/91	1	1			N	OUT OF SERVICE
1	12/6/91	1	1			N	OUT OF SERVICE
1	12/7/91	1	1		68	Y	J-910126143-48
1	12/7/91	2	1		67.2	N	
1	12/7/91	3	1		67.1	N	
1	12/7/91	4	1		67.2	N	
1	12/7/91	5	1		67.2	N	
1	12/7/91	6	1		67.3	N	
1	12/7/91	7	1		67.5	N	
1	12/7/91	8	1		67.5	N	
1	12/7/91	9	1		67.7	N	
1	12/7/91	10	1		67.8	N	
1	12/7/91	11	1		67.3	N	
1	12/14/91	1	1		68.4	Y	J-910126143-29 TC #12 SUSPECT DATA
1	12/14/91	2	1		67.4	N	
1	12/14/91	3	1		67.3	N	
1	12/14/91	4	1		67.1	N	
1	12/14/91	5	1		67.1	N	
1	12/14/91	6	1		67.1	N	
1	12/14/91	7	1		67	N	
1	12/14/91	8	1		67.1	N	
1	12/14/91	9	1		67.1	N	
1	12/14/91	10	1		67.1	N	
1	12/14/91	11	1		66.2	N	
1	12/20/91	1	1		69.3	Y	J-910126143-29 TC #12 O/S
1	12/20/91	2	1		68.1	N	
1	12/20/91	3	1		67.6	N	
1	12/20/91	4	1		67.9	N	
1	12/20/91	5	1		67.9	N	
1	12/20/91	6	1		67.9	N	
1	12/20/91	7	1		67.7	N	
1	12/20/91	8	1		67.9	N	
1	12/20/91	9	1		67.8	N	
1	12/20/91	10	1		67.9	N	
1	12/20/91	11	1		66.8	N	
1	12/29/91	1	1			N	J-910126143-29 J-3 WRITTEN NO READINGS
1	1/4/92	1	1		66.7	Y	J-910126143-50 TC #12 O/S
1	1/4/92	2	1		65.2	N	
1	1/4/92	3	1		65.1	N	
1	1/4/92	4	1		65	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102
THERMOCOUPLE DATA

COMMENTS Y=MAX TEMP TEMP F TEMP C TREE SET # THERMO # DATE TREE #

1	1/4/92	5	1	65					
1	1/4/92	6	1	65.1					
1	1/4/92	7	1	65					
1	1/4/92	8	1	65					
1	1/4/92	9	1	65					
1	1/4/92	10	1	65					
1	1/4/92	11	1	63.7					
1	1/1/92	1	1	66.1					
1	1/1/92	2	1	64.5					
1	1/1/92	3	1	64.2					
1	1/1/92	4	1	64.2					
1	1/1/92	5	1	64.5					
1	1/1/92	6	1	64.2					
1	1/1/92	7	1	64.1					
1	1/1/92	8	1	64.1					
1	1/1/92	9	1	64.1					
1	1/1/92	10	1	64.1					
1	1/1/92	11	1	62.5					
1	1/1/92	1	1	67					
1	1/16/92	1	1	65.1					
1	1/16/92	2	1	64.9					
1	1/16/92	3	1	65.2					
1	1/16/92	4	1	65.3					
1	1/16/92	5	1	65.3					
1	1/16/92	6	1	54.9					
1	1/16/92	7	1	65.3					
1	1/16/92	8	1	65.3					
1	1/16/92	9	1	65.4					
1	1/16/92	10	1	64.6					
1	1/16/92	12	1	63.9					
1	1/25/92	1	1	65					
1	1/25/92	2	1	62.9					
1	1/25/92	3	1	62.7					
1	1/25/92	4	1	62.6					
1	1/25/92	5	1	62.6					
1	1/25/92	6	1	62.6					
1	1/25/92	7	1	62.6					
1	1/25/92	8	1	62.5					
1	1/25/92	9	1	62.5					
1	1/25/92	10	1	62.4					
1	1/25/92	11	1	60.6					
1	1/28/92	1	1						
1	2/24/92	1	1	67.5					
1	2/24/92	2	1	65.1					
1	2/24/92	3	1	64.7					
1	2/24/92	4	1	64.6					
1	2/24/92	5	1	64.6					
1	2/24/92	6	1	64.5					
1	2/24/92	7	1	64.5					
1	2/24/92	8	1	64.5					
1	2/24/92	9	1	64.9					
1	2/24/92	10	1	64.2					
1	2/24/92	11	1	62					
1	2/29/92	1	1	65.9					
1	2/29/92	2	1	63.6					
1	2/29/92	3	1	63.3					
1	2/29/92	4	1	63.3					
1	2/29/92	5	1	63.3					
1	2/29/92	6	1	63.3					
1	2/29/92	7	1	63.3					
1	2/29/92	8	1	63.3					
1	2/29/92	9	1	63.3					
1	2/29/92	10	1	63.2					
1	2/29/92	11	1	61.3					
1	3/8/92	1	1	64.6					
1	3/8/92	2	1	61.9					
1	3/8/92	3	1	61.5					
1	3/8/92	4	1	61.3					

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	3/8/92	5	1		61.2	N	
1	3/8/92	6	1		61.1	N	
1	3/8/92	7	1		61	N	
1	3/8/92	8	1		60.7	N	
1	3/8/92	9	1		60.6	N	
1	3/8/92	10	1		60.2	N	
1	3/8/92	11	1		58.1	N	
1	3/14/92	1	1		62.7	Y	J 910126143-32
1	3/14/92	2	1		60.2	N	
1	3/14/92	3	1		60.1	N	
1	3/14/92	4	1		60.2	N	
1	3/14/92	5	1		60.4	N	
1	3/14/92	6	1		60.4	N	
1	3/14/92	7	1		60.7	N	
1	3/14/92	8	1		60.9	N	
1	3/14/92	9	1		61.2	N	
1	3/14/92	10	1		61.1	N	
1	3/14/92	11	1		59.1	N	
1	3/20/92	1	1		58	Y	J 91012614332 TC #12 O/S
1	3/20/92	2	1		55.2	N	
1	3/20/92	3	1		54.7	N	
1	3/20/92	4	1		54.7	N	
1	3/20/92	5	1		54.8	N	
1	3/20/92	6	1		54.7	N	
1	3/20/92	7	1		54.9	N	
1	3/20/92	8	1		52.7	N	
1	3/20/92	9	1		52.4	N	
1	3/20/92	10	1		53.8	N	
1	3/20/92	11	1		50.9	N	
1	3/28/92	1	1		62.5	Y	J 910126143-66
1	3/28/92	2	1		60.1	N	
1	3/28/92	3	1		60	N	
1	3/28/92	4	1		60.2	N	
1	3/28/92	5	1		60.3	N	
1	3/28/92	6	1		60.5	N	
1	3/28/92	7	1		60.7	N	
1	3/28/92	8	1		60.8	N	
1	3/28/92	9	1		61.2	N	
1	3/28/92	10	1		61.1	N	
1	3/28/92	11	1		59.3	N	
1	4/3/92	1	1		62.2	Y	J 910126143-14
1	4/3/92	2	1		59.9	N	
1	4/3/92	3	1		59.7	N	
1	4/3/92	4	1		59.7	N	
1	4/3/92	5	1		59.8	N	
1	4/3/92	6	1		59.9	N	
1	4/3/92	7	1		60	N	
1	4/3/92	8	1		60	N	
1	4/3/92	9	1		60.1	N	
1	4/3/92	10	1		60.1	N	
1	4/3/92	11	1		58.4	N	
1	4/11/92	1	1		63.7	Y	J 910126143-64
1	4/11/92	2	1		61.7	N	
1	4/11/92	3	1		61.4	N	
1	4/11/92	4	1		61.4	N	
1	4/11/92	5	1		61.4	N	
1	4/11/92	6	1		61.4	N	
1	4/11/92	7	1		61.3	N	
1	4/11/92	8	1		61.3	N	
1	4/11/92	9	1		61.4	N	
1	4/11/92	10	1		61.2	N	
1	4/11/92	11	1		59.5	N	
1	4/17/92	1	1		64	Y	
1	4/17/92	2	1		61.9	N	
1	4/17/92	3	1		61.7	N	
1	4/17/92	4	1		61.7	N	
1	4/17/92	5	1		61.6	N	
1	4/17/92	6	1		61.6	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	4/17/92	7	1		61.5	N	
1	4/17/92	8	1		61.4	N	
1	4/17/92	9	1		61.4	N	
1	4/17/92	10	1		61.2	N	
1	4/17/92	11	1		59.7	N	
1	4/25/92	1	1		64.5	Y	J 89052351220
1	4/25/92	2	1		62.5	N	
1	4/25/92	3	1		62.2	N	
1	4/25/92	4	1		62.1	N	
1	4/25/92	5	1		62.1	N	
1	4/25/92	6	1		61.9	N	
1	4/25/92	7	1		61.8	N	
1	4/25/92	8	1		61.7	N	
1	4/25/92	9	1		61.5	N	
1	4/25/92	10	1		61.3	N	
1	4/25/92	11	1		59.9	N	
1	4/30/92	1	1		62	Y	J 890523512-47
1	4/30/92	2	1		60	N	
1	4/30/92	3	1		59.7	N	
1	4/30/92	4	1		59.6	N	
1	4/30/92	5	1		59.4	N	
1	4/30/92	6	1		59.3	N	
1	4/30/92	7	1		59.3	N	
1	4/30/92	8	1		59.3	N	
1	4/30/92	9	1		59.4	N	
1	4/30/92	10	1		59.3	N	
1	4/30/92	11	1		58.1	N	
1	5/8/92	1	1		63.5	Y	J 910126143-48
1	5/8/92	2	1		61.8	N	
1	5/8/92	3	1		61.6	N	
1	5/8/92	4	1		61.6	N	
1	5/8/92	5	1		61.5	N	
1	5/8/92	6	1		61.5	N	
1	5/8/92	7	1		61.4	N	
1	5/8/92	8	1		61.4	N	
1	5/8/92	9	1		61.3	N	
1	5/16/92	1	1		63.2	Y	J 910126143-32
1	5/16/92	2	1		61.7	N	
1	5/16/92	3	1		61.4	N	
1	5/16/92	4	1		61.3	N	
1	5/16/92	5	1		61.3	N	
1	5/16/92	6	1		61.2	N	
1	5/16/92	7	1		61.3	N	
1	5/16/92	8	1		61.4	N	
1	5/16/92	9	1		61.5	N	
1	5/16/92	11	1		60.5	N	
1	5/24/92	1	1		62.2	Y	J 890523512-47
1	5/24/92	2	1		60.7	N	
1	5/24/92	3	1		60.4	N	
1	5/24/92	4	1		60.2	N	
1	5/24/92	5	1		60.1	N	
1	5/24/92	6	1		60	N	
1	5/24/92	7	1		59.9	N	
1	5/24/92	8	1		59.8	N	
1	5/24/92	9	1		59.7	N	
1	5/24/92	10	1		59.6	N	
1	5/24/92	11	1		58.6	N	
1	5/28/92	1	1		62.3	Y	J 890523512-47
1	5/28/92	2	1		60.8	N	
1	5/28/92	3	1		60.4	N	
1	5/28/92	4	1		60.1	N	
1	5/28/92	5	1		60.2	N	
1	5/28/92	6	1		60.1	N	
1	5/28/92	7	1		59.3	N	
1	5/28/92	8	1		59.9	N	
1	5/28/92	9	1		60	N	
1	5/28/92	10	1		59.9	N	
1	5/28/92	11	1		58.6	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	6/5/92	1	1		62.9	N	J 910126143-50 TC #3 BAD DATA
1	6/5/92	2	1		65.6	Y	
1	6/13/92	1	1		58.6	Y	J 890523512-47
1	6/13/92	2	1		58.4	N	
1	6/13/92	3	1		58.4	N	
1	6/13/92	4	1		58.4	N	
1	6/13/92	5	1		58.5	N	
1	6/13/92	6	1		58.6	N	
1	6/13/92	7	1		58.6	N	
1	6/13/92	8	1		58.6	N	
1	6/13/92	9	1		58.4	N	
1	6/13/92	10	1		58.6	N	
1	6/13/92	11	1		58.4	N	
1	6/13/92	12	1		58.1	N	
1	6/13/92	13	1		58.1	N	
1	6/20/92	1	1		63.9	Y	J 910126143-48
1	6/20/92	2	1		63.8	N	
1	6/20/92	3	1		63.8	N	
1	6/20/92	4	1		63.8	N	
1	6/20/92	5	1		63.8	N	
1	6/20/92	6	1		63.8	N	
1	6/20/92	7	1		63.8	N	
1	6/20/92	8	1		63.8	N	
1	6/20/92	9	1		63.8	N	
1	6/20/92	10	1		63.8	N	
1	6/20/92	11	1		63.7	N	
1	6/28/92	1	1		63.3	N	J TI-042 910126143-66
1	6/28/92	2	1		62.9	N	
1	6/28/92	3	1		63	N	
1	6/28/92	4	1		63	N	
1	6/28/92	5	1		63.1	N	
1	6/28/92	6	1		63.2	N	
1	6/28/92	7	1		63.2	N	
1	6/28/92	8	1		63.4	N	
1	6/28/92	9	1		63.6	N	
1	6/28/92	10	1		63.8	N	
1	6/28/92	11	1		64.2	Y	
1	7/3/92	1	1		62.9	N	J TI-041
1	7/3/92	2	1		62.6	N	
1	7/3/92	3	1		62.6	N	
1	7/3/92	4	1		62.5	N	
1	7/3/92	5	1		62.5	N	
1	7/3/92	6	1		62.6	N	
1	7/3/92	7	1		62.7	N	
1	7/3/92	8	1		62.7	N	
1	7/3/92	9	1		62.8	N	
1	7/3/92	10	1		63	N	
1	7/3/92	11	1		63.2	Y	
1	7/10/92	1	1		64.5	Y	J 910126143-42
1	7/10/92	2	1		64.4	N	
1	7/10/92	3	1		64.4	N	
1	7/10/92	4	1		64.4	N	
1	7/10/92	5	1		64.3	N	
1	7/10/92	6	1		64.3	N	
1	7/10/92	7	1		64.3	N	
1	7/10/92	8	1		64.3	N	
1	7/10/92	9	1		64.3	N	
1	7/10/92	10	1		64.2	N	
1	7/10/92	11	1		64.4	N	
1	7/18/92	1	1		64.6	N	J 910126143-42
1	7/18/92	2	1		64.7	N	
1	7/18/92	3	1		64.6	N	
1	7/18/92	4	1		64.5	N	
1	7/18/92	5	1		64.4	N	
1	7/18/92	6	1		64.3	N	
1	7/18/92	7	1		64.2	N	
1	7/18/92	8	1		64.2	N	
1	7/18/92	9	1		64.2	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102 THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	7/18/92	10	1		64.3	N	
1	7/18/92	11	1		64.9	Y	
1	7/24/92	1	1		64.7	N	J HH-9A 910126143-29
1	7/24/92	2	1		64.8	N	
1	7/24/92	3	1		64.8	N	
1	7/24/92	4	1		64.7	N	
1	7/24/92	5	1		64.6	N	
1	7/24/92	6	1		64.6	N	
1	7/24/92	7	1		63.9	N	
1	7/24/92	8	1		64.5	N	
1	7/24/92	9	1		65	N	
1	7/24/92	10	1		65.4	N	
1	7/24/92	11	1		65.8	Y	
1	8/7/92	1	1		65.2	N	J 890423320-42
1	8/7/92	2	1		65.6	N	
1	8/7/92	3	1		65.6	N	
1	8/7/92	4	1		65.6	N	
1	8/7/92	5	1		65.5	N	
1	8/7/92	6	1		65.6	N	
1	8/7/92	7	1		65.7	N	
1	8/7/92	8	1		65.8	N	
1	8/7/92	9	1		65.9	N	
1	8/7/92	10	1		66	N	
1	8/7/92	11	1		66.9	Y	
1	8/21/92	1	1		65.3	N	J 890423320-42
1	8/21/92	2	1		66.2	N	
1	8/21/92	3	1		66.2	N	
1	8/21/92	4	1		66.2	N	
1	8/21/92	5	1		66.2	N	
1	8/21/92	6	1		66.2	N	
1	8/21/92	7	1		66.2	N	
1	8/21/92	8	1		66.2	N	
1	8/21/92	9	1		66.2	N	
1	8/21/92	10	1		66.5	N	
1	8/21/92	11	1		67.5	Y	
1	8/30/92	1	1		66.9	N	J 890423320-42
1	8/30/92	2	1		67.3	N	
1	8/30/92	3	1		67.2	N	
1	8/30/92	4	1		67	N	
1	8/30/92	5	1		66.9	N	
1	8/30/92	6	1		66.8	N	
1	8/30/92	7	1		66.6	N	
1	8/30/92	8	1		64.4	N	
1	8/30/92	9	1		67	N	
1	8/30/92	10	1		67.3	N	
1	8/30/92	11	1		68.4	Y	
1	8/30/92	12	1		67	N	
1	9/6/92	1	1		65.6	N	J 890423320-42
1	9/6/92	2	1		66.5	N	
1	9/6/92	3	1		66.7	N	
1	9/6/92	4	1		66.8	N	
1	9/6/92	5	1		66.9	N	
1	9/6/92	6	1		67.2	N	
1	9/6/92	7	1		67.5	N	
1	9/6/92	8	1		67.7	N	
1	9/6/92	9	1		68	N	
1	9/6/92	10	1		68.2	N	
1	9/6/92	11	1		69.5	Y	
1	9/12/92	1	1		67.2	N	J 890423320-42
1	9/12/92	2	1		68.4	N	
1	9/12/92	3	1		68.5	N	
1	9/12/92	4	1		68.6	N	
1	9/12/92	5	1		68.6	N	
1	9/12/92	6	1		68.6	N	
1	9/12/92	7	1		68.8	N	
1	9/12/92	8	1		69	N	
1	9/12/92	9	1		69.2	N	
1	9/12/92	10	1		69.6	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	9/12/92	11	1		70.8	N	
1	9/20/92	1	1		67.9	N	J 910125143-64
1	9/20/92	2	1		68.9	N	
1	9/20/92	3	1		69	N	
1	9/20/92	4	1		69	N	
1	9/20/92	5	1		69.1	N	
1	9/20/92	6	1		69.1	N	
1	9/20/92	7	1		69.2	N	
1	9/20/92	8	1		69.2	N	
1	9/20/92	9	1		69.2	N	
1	9/20/92	10	1		69.4	N	
1	9/20/92	11	1		70.5	Y	
1	9/27/92	1	1		68.7	N	J 910126143-32
1	9/27/92	2	1		69.3	N	
1	9/27/92	3	1		69.3	N	
1	9/27/92	4	1		69.2	N	
1	9/27/92	5	1		69	N	
1	9/27/92	6	1		68.9	N	
1	9/27/92	7	1		68.9	N	
1	9/27/92	8	1		69.1	N	
1	9/27/92	9	1		69.4	N	
1	9/27/92	10	1		69.7	N	
1	9/27/92	11	1		71	Y	
1	10/1/92	1	1		65.9	N	J 890423320-42
1	10/1/92	2	1		67.1	N	
1	10/1/92	3	1		67.3	N	
1	10/1/92	4	1		67.5	N	
1	10/1/92	5	1		67.8	N	
1	10/1/92	6	1		68	N	
1	10/1/92	7	1		68.2	N	
1	10/1/92	8	1		68.5	N	
1	10/1/92	9	1		68.7	N	
1	10/1/92	10	1		69	N	
1	10/1/92	11	1		70.1	N	
1	10/10/92	1	1		67.5	N	J 910126143-48
1	10/10/92	2	1		68.3	N	
1	10/10/92	3	1		68.4	N	
1	10/10/92	4	1		68.4	N	
1	10/10/92	5	1		68.6	N	
1	10/10/92	6	1		68.6	N	
1	10/10/92	7	1		68.7	N	
1	10/10/92	8	1		68.8	N	
1	10/10/92	9	1		68.9	N	
1	10/10/92	10	1		69	N	
1	10/10/92	11	1		69.9	Y	
1	10/18/92	1	1		68.8	N	J 910125143-40
1	10/18/92	2	1		69	N	
1	10/18/92	3	1		67.9	N	
1	10/18/92	4	1		69	N	
1	10/18/92	5	1		68.8	N	
1	10/18/92	6	1		69.1	N	
1	10/18/92	7	1		69.2	N	
1	10/18/92	8	1		69.2	N	
1	10/18/92	9	1		69.2	N	
1	10/18/92	10	1		69.3	Y	
1	10/23/92	1	1		67.5	N	J 910126143-66 OMEGA
1	10/23/92	2	1		68.2	N	
1	10/23/92	3	1		68.3	N	
1	10/23/92	4	1		68.4	N	
1	10/23/92	5	1		68.6	N	
1	10/23/92	6	1		68.7	N	
1	10/23/92	7	1		68.9	N	
1	10/23/92	8	1		69.2	N	
1	10/23/92	9	1		69.4	N	
1	10/23/92	10	1		69.7	N	
1	10/23/92	11	1		70.5	Y	
1	10/28/92	1	1		69.2	N	J 91012614366
1	10/28/92	2	1		69.7	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	10/28/92	3	1		69.7	N	
1	10/28/92	4	1		69.8	N	
1	10/28/92	5	1		69.8	N	
1	10/28/92	6	1		69.8	N	
1	10/28/92	7	1		69.8	N	
1	10/28/92	8	1		69.8	N	
1	10/28/92	9	1		69.9	N	
1	10/28/92	10	1		70	N	
1	10/28/92	11	1		70.5	Y	
1	11/7/92	1	1		68.1	N	J 910126143-48
1	11/7/92	2	1		68.3	N	
1	11/7/92	3	1		68.3	N	
1	11/7/92	4	1		68.3	N	
1	11/7/92	5	1		68.4	N	
1	11/7/92	6	1		68.4	N	
1	11/7/92	7	1		68.5	N	
1	11/7/92	8	1		68.6	N	
1	11/7/92	9	1		68.6	N	
1	11/7/92	10	1		68.7	N	
1	11/7/92	11	1		69.1	Y	
1	11/15/92	1	1		66.9	N	J 890423320-42
1	11/15/92	2	1		67	N	
1	11/15/92	3	1		67	N	
1	11/15/92	4	1		67	N	
1	11/15/92	5	1		67.1	N	
1	11/15/92	6	1		67.2	N	
1	11/15/92	7	1		67.2	N	
1	11/15/92	8	1		67.2	N	
1	11/15/92	9	1		67.2	N	
1	11/15/92	10	1		67.3	N	
1	11/15/92	11	1		67.5	Y	
1	11/21/92	1	1		68.3	N	J 910126143-14
1	11/21/92	2	1		68	N	
1	11/21/92	3	1		68	N	
1	11/21/92	4	1		68	N	
1	11/21/92	5	1		67.9	N	
1	11/21/92	6	1		67.9	N	
1	11/21/92	7	1		68	N	
1	11/21/92	8	1		68	N	
1	11/21/92	9	1		68.1	N	
1	11/21/92	10	1		68.3	N	
1	11/21/92	11	1		68.4	Y	
1	11/27/92	1	1		70	Y	J 890523512-20
1	11/27/92	2	1		69.4	N	
1	11/27/92	3	1		69.2	N	
1	11/27/92	4	1		69.3	N	
1	11/27/92	5	1		69.2	N	
1	11/27/92	6	1		69.3	N	
1	11/27/92	7	1		69.3	N	
1	11/27/92	8	1		69.4	N	
1	11/27/92	9	1		69.6	N	
1	11/27/92	10	1		69.7	N	
1	11/27/92	11	1		69.5	N	
1	12/5/92	1	1		64.8	Y	J 890423320-42
1	12/5/92	2	1		64.4	N	
1	12/5/92	3	1		64.3	N	
1	12/5/92	4	1		64.3	N	
1	12/5/92	5	1		64.4	N	
1	12/5/92	6	1		64.4	N	
1	12/5/92	7	1		64.4	N	
1	12/5/92	8	1		64.5	N	
1	12/5/92	9	1		64.5	N	
1	12/5/92	10	1		64.5	N	
1	12/5/92	11	1		64.1	N	
1	12/12/92	1	1		67.6	Y	J 910126143-40
1	12/12/92	2	1		67.6	N	
1	12/12/92	3	1		65.2	N	
1	12/12/92	4	1		67.5	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102 THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	12/12/92	5	1		67	N	
1	12/12/92	6	1		67.6	N	
1	12/12/92	7	1		67.6	N	
1	12/12/92	8	1		67.6	N	
1	12/12/92	9	1		67.6	N	
1	12/12/92	10	1		67.6	N	
1	12/12/92	11	1		67.6	N	
1	12/12/92	12	1		67.4	N	
1	12/19/92	1	1		68.1	Y	J 910126143-14
1	12/19/92	2	1		66.9	N	
1	12/19/92	3	1		66.7	N	
1	12/19/92	4	1		66.8	N	
1	12/19/92	5	1		66.7	N	
1	12/19/92	6	1		66.7	N	
1	12/19/92	7	1		66.7	N	
1	12/19/92	8	1		66.7	N	
1	12/19/92	9	1		66.7	N	
1	12/19/92	10	1		66.7	N	
1	12/19/92	11	1		65.8	N	
1	12/25/92	1	1		68	Y	J 890523512-20
1	12/25/92	2	1		66.4	N	
1	12/25/92	3	1		66.3	N	
1	12/25/92	4	1		66.5	N	
1	12/25/92	5	1		66.7	N	
1	12/25/92	6	1		66.9	N	
1	12/25/92	7	1		67.2	N	
1	12/25/92	8	1		67.3	N	
1	12/25/92	9	1		67.4	N	
1	12/25/92	10	1		67.4	N	
1	12/25/92	11	1		66.2	N	
1	1/1/93	1	1		65.8	Y	J 890523512-47
1	1/1/93	2	1		64.9	N	
1	1/1/93	3	1		64.3	N	
1	1/1/93	4	1		64.3	N	
1	1/1/93	5	1		64.3	N	
1	1/1/93	6	1		64.3	N	
1	1/1/93	7	1		64.3	N	
1	1/1/93	8	1		64.3	N	
1	1/1/93	9	1		64.3	N	
1	1/1/93	10	1		64.2	N	
1	1/1/93	11	1		62.8	N	
1	1/9/93	1	1		66.8	Y	J 890523512-47
1	1/9/93	2	1		64.9	N	
1	1/9/93	3	1		64.6	N	
1	1/9/93	4	1		64.6	N	
1	1/9/93	5	1		64.5	N	
1	1/9/93	6	1		64.5	N	
1	1/9/93	7	1		64.4	N	
1	1/9/93	8	1		64.4	N	
1	1/9/93	9	1		64.3	N	
1	1/9/93	10	1		64.3	N	
1	1/9/93	11	1		62.1	N	
1	1/18/93	1	1		66.5	Y	
1	1/18/93	2	1		64.7	N	
1	1/18/93	3	1		64.4	N	
1	1/18/93	4	1		64.5	N	
1	1/18/93	5	1		64.6	N	
1	1/18/93	6	1		64.6	N	
1	1/18/93	7	1		64.7	N	
1	1/18/93	8	1		64.7	N	
1	1/18/93	9	1		64.7	N	
1	1/18/93	10	1		64.7	N	
1	1/18/93	11	1		62.8	N	
1	1/23/93	1	1		68.2	Y	J 890523512-20
1	1/23/93	2	1		65.8	N	
1	1/23/93	3	1		65.6	N	
1	1/23/93	4	1		65.5	N	
1	1/23/93	5	1		65.4	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	1/23/93	6	1		65.3	N	
1	1/23/93	7	1		65.3	N	
1	1/23/93	8	1		65.3	N	
1	1/23/93	9	1		65.3	N	
1	1/23/93	10	1		65.3	N	
1	1/23/93	11	1		63.6	N	
1	1/31/93	1	1		65.2	Y	J 910126143-40
1	1/31/93	2	1		62.7	N	
1	1/31/93	3	1		62.4	N	
1	1/31/93	4	1		62.5	N	
1	1/31/93	5	1		62.4	N	
1	1/31/93	6	1		62.4	N	
1	1/31/93	7	1		62.4	N	
1	1/31/93	8	1		62.4	N	
1	1/31/93	9	1		62.3	N	
1	1/31/93	10	1		62.2	N	
1	1/31/93	11	1		60	N	
1	2/5/93	1	1		64.8	Y	J 910126143-50
1	2/5/93	2	1		63	N	
1	2/5/93	3	1		61.5	N	
1	2/5/93	4	1		61.5	N	
1	2/5/93	5	1		61.7	N	
1	2/5/93	6	1		61.8	N	
1	2/5/93	7	1		61.8	N	
1	2/5/93	8	1		61.9	N	
1	2/5/93	9	1		61.9	N	
1	2/5/93	10	1		61.8	N	
1	2/5/93	11	1		59.5	N	
1	2/12/93	1	1		62.5	Y	J 890423320-42
1	2/12/93	2	1		60.2	N	
1	2/12/93	3	1		59.9	N	
1	2/12/93	4	1		60	N	
1	2/12/93	5	1		60.1	N	
1	2/12/93	6	1		60	N	
1	2/12/93	7	1		60	N	
1	2/12/93	8	1		60	N	
1	2/12/93	9	1		60.1	N	
1	2/12/93	10	1		59.9	N	
1	2/12/93	11	1		57.5	N	
1	2/22/93	1	1		64.8	Y	J 910126143-50
1	2/22/93	2	1		62	N	
1	2/22/93	3	1		61.7	N	
1	2/22/93	4	1		61.7	N	
1	2/22/93	5	1		61.6	N	
1	2/22/93	6	1		61.5	N	
1	2/22/93	7	1		61.5	N	
1	2/22/93	8	1		61.4	N	
1	2/22/93	9	1		61.4	N	
1	2/22/93	10	1		61.2	N	
1	2/22/93	11	1		58.7	N	
1	2/26/93	1	1		66	Y	J 900925741-79
1	2/26/93	2	1		63	N	
1	2/26/93	3	1		62	N	
1	2/26/93	4	1		62	N	
1	2/26/93	5	1		62	N	
1	2/26/93	6	1		62	N	
1	2/26/93	7	1		62	N	
1	2/26/93	8	1		62	N	
1	2/26/93	9	1		62	N	
1	2/26/93	10	1		62	N	
1	2/26/93	11	1		59	N	
1	3/5/93	1	1		62.7	Y	J 90092574-79
1	3/5/93	2	1		59.9	N	
1	3/5/93	3	1		59.6	N	
1	3/5/93	4	1		59.6	N	
1	3/5/93	5	1		59.8	N	
1	3/5/93	6	1		59.9	N	
1	3/5/93	7	1		60	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102									
THERMOCOUPLE DATA									
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS		
1	3/5/93	8	1		60.1	N			
1	3/5/93	9	1		60.3	N			
1	3/5/93	10	1		60.1	N			
1	3/5/93	11	1		58	N			
1	3/11/93	1	1		61.7	Y	J 890423320-42		
1	3/11/93	2	1		58.6	N			
1	3/11/93	3	1		58.2	N			
1	3/11/93	4	1		58.1	N			
1	3/11/93	5	1		58.1	N			
1	3/11/93	6	1		58.1	N			
1	3/11/93	7	1		58.1	N			
1	3/11/93	8	1		58.1	N			
1	3/11/93	9	1		58.2	N			
1	3/11/93	10	1		58	N			
1	3/11/93	11	1		55.7	N			
1	3/19/93	1	1		62.8	Y	J 910126143-14		
1	3/19/93	2	1		59.8	N			
1	3/19/93	3	1		59.2	N			
1	3/19/93	4	1		59.1	N			
1	3/19/93	5	1		59.2	N			
1	3/19/93	6	1		59.2	N			
1	3/19/93	7	1		59.1	N			
1	3/19/93	8	1		59.1	N			
1	3/19/93	9	1		59.1	N			
1	3/19/93	10	1		59.2	N			
1	3/19/93	11	1		56.6	N			
1	3/27/93	1	1		62.7	Y	J 910126143-32		
1	3/27/93	2	1		59.6	N			
1	3/27/93	3	1		58.9	N			
1	3/27/93	4	1		58.9	N			
1	3/27/93	5	1		59	N			
1	3/27/93	6	1		58.9	N			
1	3/27/93	7	1		58.8	N			
1	3/27/93	8	1		58.6	N			
1	3/27/93	9	1		58.7	N			
1	3/27/93	10	1		58.4	N			
1	3/27/93	11	1		55.8	N			
1	4/2/93	1	1		62.9	Y	J 910126143-32		
1	4/2/93	2	1		59.8	N			
1	4/2/93	3	1		59.4	N			
1	4/2/93	4	1		59.4	N			
1	4/2/93	5	1		59.4	N			
1	4/2/93	6	1		59.4	N			
1	4/2/93	7	1		59	N			
1	4/2/93	8	1		59	N			
1	4/2/93	9	1		59.9	N			
1	4/2/93	10	1		58.8	N			
1	4/2/93	11	1		56.4	N			
1	4/9/93	1	1		62.8	Y	J 910126143-50		
1	4/9/93	2	1		59.7	N			
1	4/9/93	3	1		59.4	N			
1	4/9/93	4	1		59.3	N			
1	4/9/93	5	1		59.2	N			
1	4/9/93	6	1		59.1	N			
1	4/9/93	7	1		59	N			
1	4/9/93	8	1		58.9	N			
1	4/9/93	9	1		58.8	N			
1	4/9/93	10	1		58.7	N			
1	4/9/93	11	1		56.3	N			
1	4/17/93	1	1		62.9	Y	TYPE J 910126143-64		
1	4/17/93	2	1		60	N			
1	4/17/93	3	1		59.7	N			
1	4/17/93	4	1		59.6	N			
1	4/17/93	5	1		59.6	N			
1	4/17/93	6	1		59.6	N			
1	4/17/93	7	1		59.6	N			
1	4/17/93	8	1		59.7	N			
1	4/17/93	9	1		59.8	N			

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	4/17/93	10	1		59.6	N	
1	4/17/93	11	1		57.5	N	
1	4/24/93	1	1		64.2	Y	J 910126143-50
1	4/24/93	2	1		59.7	N	
1	4/24/93	3	1		59.4	N	
1	4/24/93	4	1		59.3	N	
1	4/24/93	5	1		59.2	N	
1	4/24/93	6	1		59.1	N	
1	4/24/93	7	1		59	N	
1	4/24/93	8	1		58.9	N	
1	4/24/93	9	1		58.9	N	
1	4/24/93	10	1		58.6	N	
1	4/24/93	11	1		56.8	N	
1	5/1/93	1	1		62.5	Y	J 910126143-50
1	5/1/93	2	1		61.2	N	
1	5/1/93	3	1		58.6	N	
1	5/1/93	4	1		58.2	N	
1	5/1/93	5	1		58.3	N	
1	5/1/93	6	1		58.4	N	
1	5/1/93	7	1		58.4	N	
1	5/1/93	8	1		57.4	N	
1	5/1/93	9	1		58.3	N	
1	5/1/93	10	1		58.3	N	
1	5/1/93	11	1		58.2	N	
1	5/1/93	12	1		57.9	N	
1	5/8/93	1	1		62.7	Y	J 910126143-50
1	5/8/93	2	1		60.2	N	
1	5/8/93	3	1		59.9	N	
1	5/8/93	4	1		59.7	N	
1	5/8/93	5	1		59.5	N	
1	5/8/93	6	1		59.3	N	
1	5/8/93	7	1		59.1	N	
1	5/8/93	8	1		58.9	N	
1	5/8/93	9	1		58.7	N	
1	5/8/93	10	1		58.5	N	
1	5/8/93	11	1		56.9	N	
1	5/13/93	1	1		60.3	Y	J910126143-50
1	5/13/93	2	1		57.8	N	
1	5/13/93	3	1		57.6	N	
1	5/13/93	4	1		57.6	N	
1	5/13/93	5	1		57.7	N	
1	5/13/93	6	1		57.9	N	
1	5/13/93	7	1		58	N	
1	5/13/93	8	1		58.1	N	
1	5/13/93	9	1		58.3	N	
1	5/13/93	10	1		58.3	N	
1	5/13/93	11	1		56.8	N	
1	5/13/93	12	1		56.7	N	
1	5/22/93	1	1		62.3	Y	J 910126143-64
1	5/22/93	2	1		60.1	N	
1	5/22/93	3	1		59.5	N	
1	5/22/93	4	1		59.8	N	
1	5/22/93	5	1		59.7	N	
1	5/22/93	6	1		59.7	N	
1	5/22/93	7	1		59.7	N	
1	5/22/93	8	1		59.7	N	
1	5/22/93	9	1		59.8	N	
1	5/22/93	10	1		59.7	N	
1	5/22/93	11	1		58.3	N	
1	5/29/93	1	1		62.5	Y	J 910126143-32
1	5/29/93	2	1		60.6	N	
1	5/29/93	3	1		60.2	N	
1	5/29/93	4	1		60.1	N	
1	5/29/93	5	1		59.9	N	
1	5/29/93	6	1		59.7	N	
1	5/29/93	7	1		59.5	N	
1	5/29/93	8	1		59.5	N	
1	5/29/93	9	1		59.4	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	5/29/93	10	1		59.3	N	
1	5/29/93	11	1		58	N	
1	6/3/93	1	1		62.3	Y	J TI-040 TC 12 O/S
1	6/3/93	2	1		60.5	N	
1	6/3/93	3	1		60.4	N	
1	6/3/93	4	1		60.3	N	
1	6/3/93	5	1		60.1	N	
1	6/3/93	6	1		60	N	
1	6/3/93	7	1		59.9	N	
1	6/3/93	8	1		59.9	N	
1	6/3/93	9	1		59.8	N	
1	6/3/93	10	1		59.7	N	
1	6/3/93	11	1		59.6	N	
1	6/13/93	1	1		63.1	Y	J 890523512-20
1	6/13/93	2	1		61.7	N	
1	6/13/93	3	1		61.4	N	
1	6/13/93	4	1		61.2	N	
1	6/13/93	5	1		60.8	N	
1	6/13/93	6	1		60.6	N	
1	6/13/93	7	1		60.3	N	
1	6/13/93	8	1		60.2	N	
1	6/13/93	9	1		60	N	
1	6/13/93	10	1		59.9	N	
1	6/13/93	11	1		59.2	N	
1	6/19/93	1	1		63.1	Y	J 8905235612-20
1	6/19/93	2	1		62	N	
1	6/19/93	3	1		61.8	N	
1	6/19/93	4	1		61.6	N	
1	6/19/93	5	1		61.4	N	
1	6/19/93	6	1		61.3	N	
1	6/19/93	7	1		61	N	
1	6/19/93	8	1		60.7	N	
1	6/19/93	9	1		60.5	N	
1	6/19/93	10	1		60.4	N	
1	6/19/93	11	1		59.8	N	
1	6/23/93	1	1		62.35	Y	J 910126143-14
1	6/23/93	2	1		61.5	N	
1	6/23/93	3	1		61.2	N	
1	6/23/93	4	1		61.1	N	
1	6/23/93	5	1		61.1	N	
1	6/23/93	6	1		61	N	
1	6/23/93	7	1		61	N	
1	6/23/93	8	1		61.2	N	
1	6/23/93	9	1		61.3	N	
1	6/23/93	10	1		61.3	N	
1	6/23/93	11	1		60.8	N	
1	7/8/93	1	1		64.6	Y	J 910126143-66
1	7/8/93	2	1		63.8	N	
1	7/8/93	3	1		63.5	N	
1	7/8/93	4	1		63.3	N	
1	7/8/93	5	1		63.1	N	
1	7/8/93	6	1		62.9	N	
1	7/8/93	7	1		62.6	N	
1	7/8/93	8	1		62.4	N	
1	7/8/93	9	1		62.3	N	
1	7/8/93	10	1		62.3	N	
1	7/8/93	11	1		62.2	N	
1	7/16/93	1	1		63.6	Y	J 910125143-48
1	7/16/93	2	1		63.1	N	
1	7/16/93	3	1		62.9	N	
1	7/16/93	4	1		62.7	N	
1	7/16/93	5	1		62.5	N	
1	7/16/93	6	1		62.3	N	
1	7/16/93	7	1		62	N	
1	7/16/93	8	1		61.8	N	
1	7/16/93	9	1		61.7	N	
1	7/16/93	10	1		61.6	N	
1	7/16/93	11	1		61.6	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	7/24/93	1	1		63.1	Y	J 910126143-42
1	7/24/93	2	1		62.8	N	
1	7/24/93	3	1		62.7	N	
1	7/24/93	4	1		62.5	N	
1	7/24/93	5	1		62.4	N	
1	7/24/93	6	1		62.3	N	
1	7/24/93	7	1		62.1	N	
1	7/24/93	8	1		62	N	
1	7/24/93	9	1		61.9	N	
1	7/24/93	10	1		61.9	N	
1	7/24/93	11	1		62	N	
1	7/31/93	1	1		63.7	Y	J TI-039 910126143-50
1	7/31/93	2	1		63.5	N	
1	7/31/93	3	1		63.3	N	
1	7/31/93	4	1		63.1	N	
1	7/31/93	5	1		63	N	
1	7/31/93	6	1		62.9	N	
1	7/31/93	7	1		62.8	N	
1	7/31/93	8	1		62.8	N	
1	7/31/93	9	1		62.8	N	
1	7/31/93	10	1		62.9	N	
1	7/31/93	11	1		63.3	N	
1	8/13/93	1	1		63.7	Y	
1	8/13/93	2	1		63.8	N	
1	8/13/93	3	1		63.6	N	
1	8/13/93	4	1		63.5	N	
1	8/13/93	5	1		63.5	N	
1	8/13/93	6	1		63.5	N	
1	8/13/93	7	1		63.4	N	
1	8/13/93	8	1		63.4	N	
1	8/13/93	9	1		63.3	N	
1	8/13/93	10	1		63.3	N	
1	8/13/93	11	1		63.7	N	
1	8/20/93	1	1		64.1	N	J 910126143-48
1	8/20/93	2	1		64.3	N	
1	8/20/93	3	1		64.2	N	
1	8/20/93	4	1		64.2	N	
1	8/20/93	5	1		64.2	N	
1	8/20/93	6	1		64.2	N	
1	8/20/93	7	1		64.2	N	
1	8/20/93	8	1		64.2	N	
1	8/20/93	9	1		64.3	N	
1	8/20/93	10	1		64.3	N	
1	8/20/93	11	1		64.8	Y	
1	8/26/93	1	1		65.2	N	J 9101265143-48 TC 12 O/S
1	8/26/93	2	1		65.5	N	
1	8/26/93	3	1		65.3	N	
1	8/26/93	4	1		65.2	N	
1	8/26/93	5	1		65.1	N	
1	8/26/93	6	1		65.1	N	
1	8/26/93	7	1		65.3	N	
1	8/26/93	8	1		65.4	N	
1	8/26/93	9	1		65.6	N	
1	8/26/93	10	1		65.8	N	
1	8/26/93	11	1		66.7	Y	
1	9/3/93	1	1		65	N	J 910126143-48 TC 12 O/S
1	9/3/93	2	1		66	Y	
1	9/3/93	3	1		66	N	
1	9/3/93	4	1		65	N	
1	9/3/93	5	1		66	N	
1	9/3/93	6	1		66	N	
1	9/3/93	7	1		65	N	
1	9/3/93	8	1		65	N	
1	9/3/93	9	1		65	N	
1	9/3/93	10	1		66	N	
1	9/3/93	11	1		66	N	
1	9/9/93	1	1		65.1	N	J 910126143-39 TC 12 O/S
1	9/9/93	2	1		66.2	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	9/9/93	3	1		65.9	N	
1	9/9/93	4	1		65.8	N	
1	9/9/93	5	1		65.9	N	
1	9/9/93	6	1		65.8	N	
1	9/9/93	7	1		65.8	N	
1	9/9/93	8	1		65.8	N	
1	9/9/93	9	1		65.8	N	
1	9/9/93	10	1		65.9	N	
1	9/9/93	11	1		66.7	Y	
1	9/9/93	12	1			N	
1	9/16/93	1	1		68	Y	J 900925741-79
1	9/16/93	2	1		67	N	
1	9/16/93	3	1		67	N	
1	9/16/93	4	1		67	N	
1	9/16/93	5	1		67	N	
1	9/16/93	6	1		67	N	
1	9/16/93	7	1		67	N	
1	9/16/93	8	1		67	N	
1	9/16/93	9	1		67	N	
1	9/16/93	10	1		67	N	
1	9/16/93	11	1		68	N	
1	9/25/93	1	1		66	N	J TI-040 TC 12 O/S
1	9/25/93	2	1		66.3	N	
1	9/25/93	3	1		66.3	N	
1	9/25/93	4	1		66.4	N	
1	9/25/93	5	1		66.4	N	
1	9/25/93	6	1		66.6	N	
1	9/25/93	7	1		66.7	N	
1	9/25/93	8	1		66.9	N	
1	9/25/93	9	1		67	N	
1	9/25/93	10	1		67.2	N	
1	9/25/93	11	1		68	Y	
1	9/30/93	1	1		67.1	N	J 910426540-36
1	9/30/93	2	1		67.4	N	
1	9/30/93	3	1		67.5	N	
1	9/30/93	4	1		67	N	
1	9/30/93	5	1		67.2	N	
1	9/30/93	6	1		67.1	N	
1	9/30/93	7	1		67.2	N	
1	9/30/93	8	1		67.5	N	
1	9/30/93	9	1		67.5	N	
1	9/30/93	10	1		67.8	N	
1	9/30/93	11	1		69	Y	
1	10/13/93	1	1		65.7	N	J 890423320-42
1	10/13/93	2	1		66.1	N	
1	10/13/93	3	1		66.1	N	
1	10/13/93	4	1		66.2	N	
1	10/13/93	5	1		66	N	
1	10/13/93	6	1		66	N	
1	10/13/93	7	1		66	N	
1	10/13/93	8	1		66	N	
1	10/13/93	9	1		66	N	
1	10/13/93	10	1		66	N	
1	10/13/93	11	1		67.1	Y	
1	10/20/93	1	1		67	N	J 910126143-29
1	10/20/93	2	1		67.3	N	
1	10/20/93	3	1		67.3	N	
1	10/20/93	4	1		66.9	N	
1	10/20/93	5	1		66.6	N	
1	10/20/93	6	1		66.6	N	
1	10/20/93	7	1		66.6	N	
1	10/20/93	8	1		67	N	
1	10/20/93	9	1		67.1	N	
1	10/20/93	10	1		67.4	N	
1	10/20/93	11	1		68.1	Y	
1	10/26/93	1	1		67.6	N	J 910126143-50
1	10/26/93	2	1		67.8	N	
1	10/26/93	3	1		67.8	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-102							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	10/26/93	4	1		67.7	N	
1	10/26/93	5	1		67.6	N	
1	10/26/93	6	1		67.5	N	
1	10/26/93	7	1		67.5	N	
1	10/26/93	8	1		67.6	N	
1	10/26/93	9	1		67.7	N	
1	10/26/93	10	1		67.9	N	
1	10/26/93	11	1		68.5	Y	
1	11/7/93	1	1		67.4	N	J 910126143-50 TC 12 O/S
1	11/7/93	2	1		67.6	N	
1	11/7/93	3	1		67.1	N	
1	11/7/93	4	1		67	N	
1	11/7/93	5	1		67.4	N	
1	11/7/93	6	1		67.6	N	
1	11/7/93	7	1		67.8	N	
1	11/7/93	8	1		68	N	
1	11/7/93	9	1		68.3	N	
1	11/7/93	10	1		68.5	N	
1	11/7/93	11	1		69.1	Y	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-103 THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	9/18/74	1	1	26.7	80.06	N	degree C/TWINS confirm
1	9/18/74	2	1	26.7	80.06	N	degree C/TWINS confirm
1	9/18/74	3	1	23.9	75.02	N	degree C/TWINS confirm
1	9/18/74	4	1	23.9	75.02	N	degree C/TWINS confirm
1	9/18/74	5	1	23.9	75.02	N	degree C/TWINS confirm
1	9/18/74	6	1	23.9	75.02	N	degree C/TWINS confirm
1	9/18/74	7	1	23.9	75.02	N	degree C/TWINS confirm
1	9/18/74	8	1	23.9	75.02	N	degree C/TWINS confirm
1	9/18/74	9	1	23.9	75.02	N	degree C/TWINS confirm
1	9/18/74	10	1	23.9	75.02	N	degree C/TWINS confirm
1	9/18/74	11	1	24.4	75.92	N	degree C/TWINS confirm
1	9/18/74	12	1	24.4	75.92	N	degree C/TWINS confirm
1	12/11/74	1	1	23.33	73.994	Y	degree C/TWINS confirm
1	12/11/74	2	1	22.22	71.996	N	degree C/TWINS confirm
1	12/11/74	3	1	21.11	69.998	N	degree C/TWINS confirm
1	12/11/74	4	1	21.11	69.998	N	degree C/TWINS confirm
1	12/11/74	5	1	21.11	69.998	N	degree C/TWINS confirm
1	12/11/74	6	1	21.11	69.998	N	degree C/TWINS confirm
1	12/11/74	7	1	21.11	69.998	N	degree C/TWINS confirm
1	12/11/74	8	1	21.11	69.998	N	degree C/TWINS confirm
1	12/11/74	9	1	21.11	69.998	N	degree C/TWINS confirm
1	12/11/74	10	1	20.56	69.008	N	degree C/TWINS confirm
1	12/11/74	11	1	18.33	64.994	N	degree C/TWINS confirm
1	4/11/75	1	1	32	89.6	N	degree C/TWINS confirm
1	4/11/75	2	1	32	89.6	N	degree C/TWINS confirm
1	4/11/75	3	1	28	82.4	N	degree C/TWINS confirm
1	4/11/75	4	1	26	78.8	N	degree C/TWINS confirm
1	4/11/75	5	1	25	77	N	degree C/TWINS confirm
1	4/11/75	6	1	25	77	N	degree C/TWINS confirm
1	4/11/75	7	1	25	77	N	degree C/TWINS confirm
1	4/11/75	8	1	25	77	N	degree C/TWINS confirm
1	4/11/75	9	1	25	77	N	degree C/TWINS confirm
1	4/11/75	10	1	25	77	N	degree C/TWINS confirm
1	4/11/75	11	1	23	73.4	N	degree C/TWINS confirm
1	7/25/75	1	1		81	Y	
1	7/25/75	2	1		80	N	
1	7/25/75	3	1		78	N	
1	7/25/75	4	1		76	N	
1	7/25/75	5	1		76	N	
1	7/25/75	6	1		76	N	
1	7/25/75	7	1		76	N	
1	7/25/75	8	1		76	N	
1	7/25/75	9	1		76	N	
1	7/25/75	10	1		76	N	
1	7/25/75	11	1		75	N	
1	2/10/76	1	1		76	Y	
1	2/10/76	2	1		75	N	
1	2/10/76	3	1		70	N	
1	2/10/76	4	1		70	N	
1	2/10/76	5	1		70	N	
1	2/10/76	6	1		70	N	
1	2/10/76	7	1		70	N	
1	2/10/76	8	1		69	N	
1	2/10/76	9	1		69	N	
1	2/10/76	10	1		69	N	
1	2/10/76	11	1		69	N	
1	4/3/76	1	1		77	Y	
1	4/3/76	2	1		71	N	
1	4/3/76	3	1		69	N	
1	4/3/76	4	1		69	N	
1	4/3/76	5	1		68	N	
1	4/3/76	6	1		68	N	
1	4/3/76	7	1		67	N	
1	4/3/76	8	1		65	N	
1	4/3/76	9	1		65	N	
1	4/3/76	10	1		64	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-103							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	4/3/76	11	1		61	N	
1	7/20/76	1	1		70	Y	
1	7/20/76	2	1		67	N	
1	7/20/76	3	1		65	N	
1	7/20/76	4	1		65	N	
1	7/20/76	5	1		65	N	
1	7/20/76	6	1		64	N	
1	7/20/76	7	1		64	N	
1	7/20/76	8	1		64	N	
1	7/20/76	9	1		64	N	
1	7/20/76	10	1		64	N	
1	7/20/76	11	1		63	N	
1	1/11/77	1	1		88	N	
1	1/11/77	2	1		89	Y	
1	1/11/77	3	1		82	N	
1	1/11/77	4	1		87	N	
1	1/11/77	5	1		84	N	
1	1/11/77	6	1		84	N	
1	1/11/77	7	1		84	N	
1	1/11/77	8	1		84	N	
1	1/11/77	9	1		84	N	
1	1/11/77	10	1		84	N	
1	1/11/77	11	1		81	N	
1	5/24/77	1	1		73	Y	
1	5/24/77	2	1		72	N	
1	5/24/77	3	1		68	N	
1	5/24/77	4	1		66	N	
1	5/24/77	5	1		64	N	
1	5/24/77	6	1		64	N	
1	5/24/77	7	1		64	N	
1	5/24/77	8	1		64	N	
1	5/24/77	9	1		64	N	
1	5/24/77	10	1		63	N	
1	5/24/77	11	1		62	N	
1	7/26/77	1	1		65	Y	
1	7/26/77	2	1		65	N	
1	7/26/77	3	1		64	N	
1	7/26/77	4	1		64	N	
1	7/26/77	5	1		64	N	
1	7/26/77	6	1		64	N	
1	7/26/77	7	1		64	N	
1	7/26/77	8	1		64	N	
1	7/26/77	9	1		64	N	
1	7/26/77	10	1		63	N	
1	7/26/77	11	1		63	N	
1	7/26/77	12	1		63	N	
1	10/24/77	1	1		81	Y	
1	10/24/77	2	1		80	N	
1	10/24/77	3	1		76	N	
1	10/24/77	4	1		75	N	
1	10/24/77	5	1		75	N	
1	10/24/77	6	1		75	N	
1	10/24/77	7	1		75	N	
1	10/24/77	8	1		75	N	
1	10/24/77	9	1		75	N	
1	10/24/77	10	1		75	N	
1	10/24/77	11	1		74	N	
1	1/16/78	1	1		91	Y	
1	1/16/78	2	1		89	N	
1	1/16/78	3	1		89	N	
1	1/16/78	4	1		89	N	
1	1/16/78	5	1		89	N	
1	1/16/78	6	1		89	N	
1	1/16/78	7	1		89	N	
1	1/16/78	8	1		89	N	
1	1/16/78	9	1		89	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-103							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	1/16/78	10	1		88	N	
1	1/16/78	11	1		86	N	
1	4/24/78	1	1		72	Y	
1	4/24/78	2	1		69	N	
1	4/24/78	3	1		67	N	
1	4/24/78	4	1		67	N	
1	4/24/78	5	1		66	N	
1	4/24/78	6	1		66	N	
1	4/24/78	7	1		66	N	
1	4/24/78	8	1		66	N	
1	4/24/78	9	1		66	N	
1	4/24/78	10	1		66	N	
1	4/24/78	11	1		66	N	
1	4/24/78	12	1		59	N	
1	7/16/78	1	1		76	Y	
1	7/16/78	2	1		69	N	
1	7/16/78	3	1		70	N	
1	7/16/78	4	1		70	N	
1	7/16/78	5	1		69	N	
1	7/16/78	6	1		68	N	
1	7/16/78	7	1		70	N	
1	7/16/78	8	1		68	N	
1	7/16/78	9	1		69	N	
1	7/16/78	10	1		70	N	
1	7/16/78	11	1		69	N	
1	1/5/79	1	1		73	Y	
1	1/5/79	2	1		72	N	
1	1/5/79	3	1		72	N	
1	1/5/79	4	1		72	N	
1	1/5/79	5	1		72	N	
1	1/5/79	6	1		72	N	
1	1/5/79	7	1		72	N	
1	1/5/79	8	1		72	N	
1	1/5/79	9	1		72	N	
1	1/5/79	10	1		72	N	
1	1/5/79	11	1		69	N	
1	1/5/79	12	1		68	N	
1	4/7/79	1	1		67	Y	
1	4/7/79	2	1		65	N	
1	4/7/79	3	1		65	N	
1	4/7/79	4	1		65	N	
1	4/7/79	5	1		65	N	
1	4/7/79	6	1		65	N	
1	4/7/79	7	1		64	N	
1	4/7/79	8	1		64	N	
1	4/7/79	9	1		64	N	
1	4/7/79	10	1		64	N	
1	4/7/79	11	1		61	N	
1	7/1/79	1	1		64	Y	
1	7/1/79	2	1		62	N	
1	7/1/79	4	1		63	N	
1	7/1/79	5	1		63	N	
1	7/1/79	6	1		63	N	
1	7/1/79	7	1		63	N	
1	7/1/79	8	1		63	N	
1	7/1/79	9	1		63	N	
1	7/1/79	10	1		63	N	
1	7/1/79	11	1		63	N	
1	10/8/79	1	1		75	Y	
1	10/8/79	2	1		72	N	
1	10/8/79	3	1		74	N	
1	10/8/79	5	1		74	N	
1	10/8/79	6	1		74	N	
1	10/8/79	7	1		74	N	
1	10/8/79	8	1		74	N	
1	10/8/79	9	1		74	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-103							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	10/8/79	10	1		74	N	
1	10/8/79	11	1		75	N	
1	1/9/80	1	1		78	Y	
1	1/9/80	2	1		75	N	
1	1/9/80	3	1		75	N	
1	1/9/80	4	1		75	N	
1	1/9/80	5	1		75	N	
1	1/9/80	6	1		75	N	
1	1/9/80	7	1		75	N	
1	1/9/80	8	1		75	N	
1	1/9/80	9	1		75	N	
1	1/9/80	10	1		75	N	
1	1/9/80	11	1		72	N	
1	4/4/80	1	1			N	O/S
1	7/5/80	1	1		78	Y	
1	7/5/80	2	1		78	N	
1	7/5/80	3	1		78	N	
1	7/5/80	4	1		78	N	
1	7/5/80	5	1		78	N	
1	7/5/80	6	1		78	N	
1	7/5/80	7	1		78	N	
1	7/5/80	8	1		78	N	
1	7/5/80	9	1		78	N	
1	7/5/80	10	1		78	N	
1	7/5/80	11	1		78	N	
1	7/5/80	12	1		78	N	
1	10/26/80	1	1		76	Y	
1	10/26/80	2	1		76	N	
1	10/26/80	3	1		76	N	
1	1/19/82	1	1		79	Y	
1	1/19/82	2	1		78	N	
1	1/19/82	3	1		77	N	
1	1/19/82	4	1		77	N	
1	1/19/82	5	1		75	N	
1	1/19/82	6	1		77	N	
1	1/19/82	7	1		77	N	
1	1/19/82	8	1		76	N	
1	1/19/82	9	1		76	N	
1	1/19/82	10	1		76	N	
1	1/19/82	11	1		76	N	
1	1/19/82	12	1		76	N	
1	4/6/82	1	1			N	O/S
1	7/13/82	1	1		71	Y	
1	7/13/82	2	1		71	N	
1	7/13/82	3	1		71	N	
1	7/13/82	4	1		71	N	
1	7/13/82	5	1		71	N	
1	7/13/82	6	1		71	N	
1	7/13/82	7	1		71	N	
1	7/13/82	8	1		71	N	
1	7/13/82	9	1		71	N	
1	7/13/82	10	1		71	N	
1	7/13/82	11	1		71	N	
1	7/13/82	12	1		71	N	
1	10/16/82	1	1		77	N	
1	10/16/82	2	1		78	Y	
1	10/16/82	3	1		76	N	
1	10/16/82	4	1		77	N	
1	10/16/82	5	1		77	N	
1	10/16/82	6	1		77	N	
1	10/16/82	7	1		77	N	
1	10/16/82	8	1		77	N	
1	10/16/82	9	1		78	N	
1	10/16/82	10	1		76	N	
1	1/8/83	1	1			N	
1	4/3/83	1	1			N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-103							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	10/13/83	1	1			N	
1	11/1/83	1	1			N	NO DATA SHEETS IN OFFICE FOR 103-BX 10/83 THRU 11/91
1	11/12/91	1	1			N	
1	1/2/92	1	1			N	
1	7/2/92	1	1			N	
1	1/1/93	1	1			N	
1	7/24/93	1	1			N	NO THERMOCOUPLE READINGS O/S TC#1-14 O/S
1	7/31/93	1	1			N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-104							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	9/18/74	1	1	31.7	89.06	Y	degree C/TWINS confirm
1	9/18/74	2	1	27.8	82.04	N	degree C/TWINS confirm
1	9/18/74	3	1	26.7	80.06	N	degree C/TWINS confirm
1	9/18/74	4	1	26.7	80.06	N	degree C/TWINS confirm
1	9/18/74	5	1	26.7	80.06	N	degree C/TWINS confirm
1	9/18/74	6	1	26.7	80.06	N	degree C/TWINS confirm
1	9/18/74	7	1	26.7	80.06	N	degree C/TWINS confirm
1	9/18/74	8	1	26.7	80.06	N	degree C/TWINS confirm
1	9/18/74	9	1	26.7	80.06	N	degree C/TWINS confirm
1	9/18/74	10	1	29.9	85.82	N	degree C/TWINS confirm
1	9/18/74	11	1	29.9	85.82	N	degree C/TWINS confirm
1	9/18/74	12	1	29.9	85.82	N	degree C/TWINS confirm
1	9/18/74	13	1	29.9	85.82	N	degree C/TWINS confirm
1	9/18/74	14	1	29.9	85.82	N	degree C/TWINS confirm
1	12/11/74	1	1	25.56	78.008	N	degree C/TWINS confirm
1	12/11/74	2	1	26.67	80.006	Y	degree C/TWINS confirm
1	12/11/74	3	1	22.22	71.996	N	degree C/TWINS confirm
1	12/11/74	4	1	22.22	71.996	N	degree C/TWINS confirm
1	12/11/74	5	1	19.44	66.992	N	degree C/TWINS confirm
1	12/11/74	6	1	16.67	62.006	N	degree C/TWINS confirm
1	12/11/74	7	1	16.67	62.006	N	degree C/TWINS confirm
1	12/11/74	8	1	16.67	62.006	N	degree C/TWINS confirm
1	12/11/74	9	1	16.67	62.006	N	degree C/TWINS confirm
1	12/11/74	10	1	16.67	62.006	N	degree C/TWINS confirm
1	12/11/74	11	1	16.67	62.006	N	degree C/TWINS confirm
1	12/11/74	12	1	16.67	62.006	N	degree C/TWINS confirm
1	4/5/75	2	1		68	Y	
1	4/5/75	3	1		68	N	
1	4/5/75	4	1		63	N	
1	4/5/75	5	1		64	N	
1	4/5/75	6	1		64	N	
1	4/5/75	7	1		64	N	
1	4/5/75	8	1		64	N	
1	4/5/75	9	1		65	N	
1	4/5/75	10	1		65	N	
1	4/5/75	11	1		65	N	
1	4/10/75	2	1	22	71.6	Y	raw data - asumed degree C
1	4/10/75	3	1	21	69.8	N	raw data - asumed degree C
1	4/10/75	4	1	21	69.8	N	raw data - asumed degree C
1	4/10/75	5	1	20	68	N	raw data - asumed degree C
1	4/10/75	6	1	20	68	N	raw data - asumed degree C
1	4/10/75	7	1	19	66.2	N	raw data - asumed degree C
1	4/10/75	8	1	20	68	N	raw data - asumed degree C
1	4/10/75	9	1	18	64.4	N	raw data - asumed degree C
1	4/10/75	10	1	19	66.2	N	raw data - asumed degree C
1	4/10/75	11	1	19	66.2	N	raw data - asumed degree C
1	4/10/75	12	1	19	66.2	N	raw data - asumed degree C
1	4/10/75	13	1	20	68	N	raw data - asumed degree C
1	4/10/75	14	1	19	66.2	N	raw data - asumed degree C
1	7/25/75	2	1		75	Y	
1	7/25/75	3	1		73	N	
1	7/25/75	4	1		72	N	
1	7/25/75	5	1		71	N	
1	7/25/75	6	1		70	N	
1	7/25/75	7	1		70	N	
1	7/25/75	8	1		70	N	
1	7/25/75	9	1		70	N	
1	7/25/75	10	1		71	N	
1	7/25/75	11	1		71	N	
1	7/25/75	12	1		72	N	
1	7/25/75	13	1		72	N	
1	7/25/75	14	1		75	N	
1	2/10/76	1	1			N	O/S
1	1/11/77	2	1		99	Y	
1	1/11/77	3	1		99	N	
1	1/11/77	4	1		89	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-104							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	1/11/77	5	1		85	N	
1	1/11/77	6	1		85	N	
1	1/11/77	7	1		85	N	
1	1/11/77	8	1		85	N	
1	1/11/77	9	1		85	N	
1	1/11/77	10	1		85	N	
1	1/11/77	11	1		84	N	
1	4/26/77	1	1		50	N	
1	4/26/77	2	1		50	N	
1	4/26/77	3	1		50	N	
1	4/26/77	4	1		50	N	
1	4/26/77	5	1		51	Y	
1	4/26/77	6	1		51	N	
1	4/26/77	7	1		51	N	
1	4/26/77	8	1		51	N	
1	4/26/77	9	1		51	N	
1	4/26/77	10	1		50	N	
1	4/26/77	11	1		50	N	
1	4/26/77	12	1		50	N	
1	5/19/77	1	1		68	N	
1	5/19/77	2	1		68	N	
1	5/19/77	3	1		68	N	
1	5/19/77	4	1		68	N	
1	5/19/77	5	1		68	N	
1	5/19/77	6	1		70	N	
1	5/19/77	7	1		70	N	
1	5/19/77	8	1		70	N	
1	5/19/77	9	1		70	N	
1	5/19/77	10	1		70	N	
1	5/19/77	11	1		72	Y	
1	5/19/77	12	1		68	N	
1	7/7/77	1	1		77	N	
1	7/7/77	2	1		77	N	
1	7/7/77	3	1		77	N	
1	7/7/77	4	1		77	N	
1	7/7/77	5	1		77	N	
1	7/7/77	6	1		79	N	
1	7/7/77	7	1		81	Y	
1	7/7/77	8	1		81	N	
1	7/7/77	9	1		81	N	
1	7/7/77	10	1		81	N	
1	7/7/77	11	1		81	N	
1	7/7/77	12	1		81	N	
1	7/7/77	13	1		77	N	
1	7/7/77	14	1		77	N	
1	7/26/77	1	1		57	N	
1	7/26/77	2	1		56	N	
1	7/26/77	3	1		58	N	
1	7/26/77	4	1		58	N	
1	7/26/77	5	1		58	N	
1	7/26/77	6	1		58	N	
1	7/26/77	7	1		59	Y	
1	7/26/77	8	1		59	N	
1	7/26/77	9	1		59	N	
1	7/26/77	10	1		59	N	
1	7/26/77	11	1		59	N	
1	7/26/77	12	1		59	N	
1	8/21/77	1	1		118	N	
1	8/21/77	2	1		118	N	
1	8/21/77	3	1		118	N	
1	8/21/77	4	1		118	N	
1	8/21/77	5	1		120	N	
1	8/21/77	6	1		120	N	
1	8/21/77	7	1		120	N	
1	8/21/77	8	1		120	N	
1	8/21/77	9	1		118	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-104							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	8/21/77	10	1		120	N	
1	8/21/77	11	1		122	N	
1	8/21/77	12	1		124	Y	
1	8/21/77	13	1		124	N	
1	8/21/77	14	1		124	N	
1	9/12/77	1	1	28	82.4	N	degree C/TWINS confirm
1	9/12/77	2	1	27	80.6	N	degree C/TWINS confirm
1	9/12/77	3	1	28	82.4	N	degree C/TWINS confirm
1	9/12/77	4	1	30	86	N	degree C/TWINS confirm
1	9/12/77	5	1	31	87.8	Y	degree C/TWINS confirm
1	9/12/77	6	1	31	87.8	N	degree C/TWINS confirm
1	9/12/77	7	1	30	86	N	degree C/TWINS confirm
1	9/12/77	8	1	30	86	N	degree C/TWINS confirm
1	9/12/77	9	1	30	86	N	degree C/TWINS confirm
1	9/12/77	10	1	30	86	N	degree C/TWINS confirm
1	9/12/77	11	1	30	86	N	degree C/TWINS confirm
1	9/12/77	12	1	30	86	N	degree C/TWINS confirm
1	9/12/77	13	1	31	87.8	N	degree C/TWINS confirm
1	9/12/77	14	1	31	87.8	N	degree C/TWINS confirm
1	10/24/77	2	1		82	Y	
1	10/24/77	3	1		82	N	
1	10/24/77	4	1		79	N	
1	10/24/77	5	1		79	N	
1	10/24/77	6	1		79	N	
1	10/24/77	7	1		79	N	
1	10/24/77	8	1		79	N	
1	10/24/77	9	1		79	N	
1	10/24/77	10	1		79	N	
1	10/24/77	11	1		78	N	
1	11/30/77	1	1		105	Y	
1	11/30/77	2	1		103	N	
1	11/30/77	3	1		97	N	
1	11/30/77	4	1		97	N	
1	11/30/77	5	1		97	N	
1	11/30/77	6	1		97	N	
1	11/30/77	7	1		97	N	
1	11/30/77	8	1		97	N	
1	11/30/77	9	1		97	N	
1	11/30/77	10	1		97	N	
1	11/30/77	11	1		96	N	
1	11/30/77	12	1		94	N	
1	1/16/78	1	1		98	Y	
1	1/16/78	2	1		92	N	
1	1/16/78	3	1		82	N	
1	1/16/78	4	1		82	N	
1	1/16/78	5	1		81	N	
1	1/16/78	6	1		81	N	
1	1/16/78	7	1		80	N	
1	1/16/78	8	1		80	N	
1	1/16/78	9	1		80	N	
1	1/16/78	10	1		76	N	
1	1/16/78	11	1		76	N	
1	1/16/78	12	1		61	N	
1	4/24/78	1	1		84	Y	
1	4/24/78	2	1		82	N	
1	4/24/78	3	1		78	N	
1	4/24/78	4	1		75	N	
1	4/24/78	6	1		71	N	
1	4/24/78	7	1		68	N	
1	4/24/78	8	1		68	N	
1	4/24/78	9	1		68	N	
1	4/24/78	10	1		68	N	
1	4/24/78	11	1		68	N	
1	4/24/78	12	1		68	N	
1	6/17/78	1	1		77	Y	
1	6/17/78	2	1		75	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-104							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	6/17/78	3	1		70	N	
1	6/17/78	4	1		70	N	
1	6/17/78	5	1		69	N	
1	6/17/78	6	1		69	N	
1	6/17/78	7	1		69	N	
1	6/17/78	8	1		69	N	
1	6/17/78	9	1		69	N	
1	6/17/78	10	1		69	N	
1	6/17/78	11	1		69	N	
1	6/17/78	12	1		69	N	
1	7/16/78	1	1		84	Y	
1	7/16/78	2	1		82	N	
1	7/16/78	3	1		77	N	
1	7/16/78	4	1		75	N	
1	7/16/78	5	1		74	N	
1	7/16/78	6	1		76	N	
1	7/16/78	7	1		76	N	
1	7/16/78	8	1		75	N	
1	7/16/78	9	1		74	N	
1	7/16/78	10	1		76	N	
1	7/16/78	11	1		74	N	
1	7/16/78	12	1		75	N	
1	7/16/78	13	1		75	N	
1	7/16/78	14	1		75	N	
1	8/13/78	1	1		76	N	
1	8/13/78	2	1		77	Y	
1	8/13/78	3	1		72	N	
1	8/13/78	4	1		72	N	
1	8/13/78	5	1		71	N	
1	8/13/78	6	1		71	N	
1	8/13/78	7	1		71	N	
1	8/13/78	8	1		71	N	
1	8/13/78	9	1		71	N	
1	8/13/78	10	1		71	N	
1	8/13/78	11	1		71	N	
1	8/13/78	12	1		71	N	
1	8/13/78	13	1		72	N	
1	8/13/78	14	1		76	N	
1	11/9/78	1	1		88	Y	
1	11/9/78	2	1		86	N	
1	11/9/78	3	1		80	N	
1	11/9/78	4	1		80	N	
1	11/9/78	5	1		79	N	
1	11/9/78	6	1		79	N	
1	11/9/78	7	1		79	N	
1	11/9/78	8	1		79	N	
1	11/9/78	9	1		79	N	
1	11/9/78	10	1		78	N	
1	11/9/78	11	1		78	N	
1	11/9/78	12	1		77	N	
1	11/9/78	13	1		72	N	
1	11/9/78	14	1		65	N	
1	12/5/78	1	1		104	Y	
1	12/5/78	2	1		103	N	
1	12/5/78	3	1		100	N	
1	12/5/78	4	1		100	N	
1	12/5/78	5	1		100	N	
1	12/5/78	6	1		96	N	
1	12/5/78	7	1		96	N	
1	12/5/78	8	1		96	N	
1	12/5/78	9	1		96	N	
1	12/5/78	10	1		96	N	
1	12/5/78	11	1		96	N	
1	12/5/78	12	1		92	N	
1	12/5/78	13	1		86	N	
1	12/5/78	14	1		77	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-104							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	12/23/78	1	1		84	Y	
1	12/23/78	2	1		83	N	
1	12/23/78	3	1		79	N	
1	12/23/78	4	1		79	N	
1	12/23/78	5	1		77	N	
1	12/23/78	6	1		73	N	
1	12/23/78	7	1		73	N	
1	12/23/78	8	1		73	N	
1	12/23/78	11	1		72	N	
1	12/23/78	12	1		70	N	
1	12/23/78	13	1		62	N	
1	12/23/78	14	1		53	N	
1	1/5/79	1	1		91	Y	
1	1/5/79	2	1		90	N	
1	1/5/79	3	1		86	N	
1	1/5/79	4	1		85	N	
1	1/5/79	5	1		83	N	
1	1/5/79	6	1		79	N	
1	1/5/79	7	1		71	N	
1	1/5/79	8	1		71	N	
1	1/5/79	9	1		71	N	
1	1/5/79	10	1		71	N	
1	1/5/79	11	1		78	N	
1	1/5/79	12	1		71	N	
1	1/5/79	13	1		68	N	
1	1/5/79	14	1		56	N	
1	7/1/79	1	1		80	Y	
1	7/1/79	2	1		79	N	
1	7/1/79	3	1		75	N	
1	7/1/79	4	1		74	N	
1	7/1/79	5	1		74	N	
1	7/1/79	6	1		74	N	
1	7/1/79	7	1		74	N	
1	7/1/79	8	1		74	N	
1	7/1/79	9	1		74	N	
1	7/1/79	10	1		74	N	
1	7/1/79	11	1		74	N	
1	7/1/79	12	1		74	N	
1	7/1/79	13	1		73	N	
1	7/1/79	14	1		75	N	
1	8/12/79	1	1		84	Y	
1	8/12/79	2	1		83	N	
1	8/12/79	3	1		81	N	
1	8/12/79	4	1		81	N	
1	8/12/79	5	1		81	N	
1	8/12/79	6	1		81	N	
1	8/12/79	7	1		81	N	
1	8/12/79	8	1		81	N	
1	8/12/79	9	1		81	N	
1	8/12/79	10	1		81	N	
1	8/12/79	11	1		81	N	
1	8/12/79	12	1		81	N	
1	8/12/79	13	1		81	N	
1	8/12/79	14	1		84	N	
1	9/4/79	1	1		79	Y	
1	9/4/79	2	1		79	N	
1	9/4/79	3	1		77	N	
1	9/4/79	4	1		77	N	
1	9/4/79	5	1		76	N	
1	9/4/79	6	1		76	N	
1	9/4/79	7	1		76	N	
1	9/4/79	8	1		76	N	
1	9/4/79	9	1		76	N	
1	9/4/79	10	1		76	N	
1	9/4/79	11	1		76	N	
1	9/4/79	12	1		76	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-104							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	10/8/79	1	1		84	Y	
1	10/8/79	2	1		84	N	
1	10/8/79	3	1		80	N	
1	10/8/79	4	1		81	N	
1	10/8/79	5	1		80	N	
1	10/8/79	6	1		80	N	
1	10/8/79	7	1		80	N	
1	10/8/79	8	1		80	N	
1	10/8/79	9	1		80	N	
1	10/8/79	10	1		80	N	
1	10/8/79	11	1		80	N	
1	10/8/79	12	1		80	N	
1	10/8/79	13	1		80	N	
1	1/9/80	1	1		103	Y	
1	1/9/80	2	1		101	N	
1	1/9/80	3	1		94	N	
1	1/9/80	4	1		93	N	
1	1/9/80	5	1		90	N	
1	1/9/80	6	1		90	N	
1	1/9/80	7	1		90	N	
1	1/9/80	8	1		90	N	
1	1/9/80	9	1		89	N	
1	1/9/80	10	1		89	N	
1	1/9/80	11	1		87	N	
1	1/9/80	12	1		81	N	
1	1/9/80	13	1		72	N	
1	2/9/80	1	1		103	Y	
1	2/9/80	2	1		99	N	
1	2/9/80	3	1		94	N	
1	2/9/80	4	1		94	N	
1	2/9/80	5	1		94	N	
1	2/9/80	6	1		95	N	
1	2/9/80	7	1		92	N	
1	2/9/80	8	1		91	N	
1	2/9/80	9	1		92	N	
1	2/9/80	10	1		94	N	
1	2/9/80	11	1		93	N	
1	2/9/80	12	1		90	N	
1	2/9/80	13	1		87	N	
1	2/9/80	14	1		82	N	
1	4/4/80	1	1		82	Y	
1	4/4/80	2	1		80	N	
1	4/4/80	3	1		75	N	
1	4/4/80	4	1		73	N	
1	4/4/80	5	1		71	N	
1	4/4/80	6	1		70	N	
1	4/4/80	7	1		70	N	
1	4/4/80	8	1		70	N	
1	4/4/80	9	1		70	N	
1	4/4/80	10	1		70	N	
1	4/4/80	11	1		70	N	
1	4/4/80	12	1		70	N	
1	4/4/80	13	1		69	N	
1	4/4/80	14	1		68	N	
1	5/4/80	1	1		71	Y	
1	5/4/80	2	1		64	N	
1	5/4/80	3	1			N	57 - suspect data (low)
1	5/4/80	4	1			N	54 - suspect data (low)
1	5/4/80	5	1			N	51 - suspect data (low)
1	5/4/80	6	1			N	51 - suspect data (low)
1	5/4/80	7	1			N	49 - suspect data (low)
1	5/4/80	8	1			N	47 - suspect data (low)
1	5/4/80	9	1			N	42 - suspect data (low)
1	5/4/80	10	1			N	42 - suspect data (low)
1	5/4/80	11	1			N	42 - suspect data (low)
1	5/4/80	12	1			N	41 - suspect data (low)

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-104							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	5/4/80	13	1			N	31 - suspect data (low)
1	5/4/80	14	1			N	35 - suspect data (low)
1	6/11/80	1	1		77	Y	
1	6/11/80	2	1		76	N	
1	6/11/80	3	1		73	N	
1	6/11/80	4	1		73	N	
1	6/11/80	5	1		73	N	
1	6/11/80	6	1		73	N	
1	6/11/80	7	1		73	N	
1	6/11/80	8	1		73	N	
1	6/11/80	9	1		72	N	
1	6/11/80	10	1		72	N	
1	6/11/80	11	1		72	N	
1	6/11/80	12	1		72	N	
1	6/11/80	13	1		71	N	
1	6/11/80	14	1		71	N	
1	7/5/80	1	1		70	N	
1	7/5/80	2	1		70	N	
1	7/5/80	3	1		71	Y	
1	7/5/80	4	1		71	N	
1	7/5/80	5	1		71	N	
1	7/5/80	6	1		71	N	
1	7/5/80	7	1		71	N	
1	7/5/80	8	1		71	N	
1	7/5/80	9	1		72	N	
1	7/5/80	10	1		72	N	
1	7/5/80	11	1		72	N	
1	7/5/80	12	1		72	N	
1	7/5/80	13	1		71	N	
1	7/5/80	14	1		71	N	
1	8/12/80	1	1		75	N	
1	8/12/80	2	1		74	N	
1	8/12/80	3	1		74	N	
1	8/12/80	4	1		74	N	
1	8/12/80	5	1		74	N	
1	8/12/80	6	1		74	N	
1	8/12/80	7	1		75	N	
1	8/12/80	8	1		76	N	
1	8/12/80	9	1		76	N	
1	8/12/80	10	1		76	N	
1	8/12/80	11	1		77	N	
1	8/12/80	12	1		77	N	
1	8/12/80	13	1		78	N	
1	8/12/80	14	1		84	Y	
1	9/11/80	1	1		87	Y	
1	9/11/80	2	1		85	N	
1	9/11/80	3	1		84	N	
1	9/11/80	4	1		84	N	
1	9/11/80	5	1		83	N	
1	9/11/80	6	1		84	N	
1	9/11/80	7	1		84	N	
1	9/11/80	8	1		85	N	
1	9/11/80	9	1		85	N	
1	9/11/80	10	1		85	N	
1	9/11/80	11	1		86	N	
1	9/11/80	12	1		86	N	
1	9/11/80	13	1		86	N	
1	9/11/80	14	1		86	N	
1	10/26/80	1	1		87	Y	
1	10/26/80	2	1		87	N	
1	10/26/80	3	1		85	N	
1	10/26/80	4	1		85	N	
1	10/26/80	5	1		84	N	
1	10/26/80	6	1		84	N	
1	10/26/80	7	1		82	N	
1	10/26/80	8	1		82	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-104							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	10/26/80	9	1		81	N	
1	10/26/80	10	1		81	N	
1	10/26/80	11	1		81	N	
1	10/26/80	12	1		81	N	
1	10/26/80	13	1		78	N	
1	10/26/80	14	1		73	N	
1	12/26/80	1	1			N	O/S
1	7/13/82	1	1			N	O/S
1	1/8/83	1	1			N	O/S
1	4/3/83	1	1			N	O/S
1	11/12/91	1	1			N	O/S
1	1/2/92	1	1			N	O/S
1	7/2/92	1	1			N	O/S
1	1/1/93	1	1			N	O/S

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-105							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	9/3/74	1	1	49	120.2	Y	degree C/TWINS confirm
1	9/3/74	2	1	49	120.2	N	degree C/TWINS confirm
1	9/3/74	3	1	49	120.2	N	degree C/TWINS confirm
1	9/3/74	4	1	49	120.2	N	degree C/TWINS confirm
1	9/3/74	5	1	48	118.4	N	degree C/TWINS confirm
1	9/3/74	6	1	46	114.8	N	degree C/TWINS confirm
1	9/3/74	7	1	45	113	N	degree C/TWINS confirm
1	9/3/74	8	1	45	113	N	degree C/TWINS confirm
1	9/3/74	9	1	45	113	N	degree C/TWINS confirm
1	9/3/74	10	1	45	113	N	degree C/TWINS confirm
1	9/3/74	11	1	45	113	N	degree C/TWINS confirm
1	9/3/74	12	1	44	111.2	N	degree C/TWINS confirm
1	9/18/74	1	1	21.1	69.98	N	degree C/TWINS confirm
1	9/18/74	2	1	21.1	69.98	N	degree C/TWINS confirm
1	9/18/74	3	1	21.1	69.98	N	degree C/TWINS confirm
1	9/18/74	4	1	21.1	69.98	N	degree C/TWINS confirm
1	9/18/74	5	1	21.1	69.98	N	degree C/TWINS confirm
1	9/18/74	6	1	23.3	73.94	N	degree C/TWINS confirm
1	9/18/74	7	1	23.3	73.94	N	degree C/TWINS confirm
1	9/18/74	8	1	23.9	75.02	N	degree C/TWINS confirm
1	9/18/74	9	1	23.9	75.02	N	degree C/TWINS confirm
1	9/18/74	10	1	23.9	75.02	N	degree C/TWINS confirm
1	9/18/74	11	1	24.4	75.92	Y	degree C/TWINS confirm
1	9/18/74	12	1	24.4	75.92	N	degree C/TWINS confirm
1	12/11/74	1	1	20.56	69.008	Y	degree C/TWINS confirm
1	12/11/74	2	1	20.56	69.008	N	degree C/TWINS confirm
1	12/11/74	3	1	20.56	69.008	N	degree C/TWINS confirm
1	12/11/74	4	1	20.56	69.008	N	degree C/TWINS confirm
1	12/11/74	5	1	20.56	69.008	N	degree C/TWINS confirm
1	12/11/74	6	1	20.56	69.008	N	degree C/TWINS confirm
1	12/11/74	7	1	18.89	66.002	N	degree C/TWINS confirm
1	12/11/74	8	1	18.89	66.002	N	degree C/TWINS confirm
1	12/11/74	9	1	18.89	66.002	N	degree C/TWINS confirm
1	12/11/74	10	1	18.89	66.002	N	degree C/TWINS confirm
1	12/11/74	11	1	18.89	66.002	N	degree C/TWINS confirm
1	12/11/74	12	1	18.89	66.002	N	degree C/TWINS confirm
1	4/10/75	1	1	24	75.2	Y	degree C/TWINS confirm
1	4/10/75	2	1	24	75.2	N	degree C/TWINS confirm
1	4/10/75	3	1	22	71.6	N	degree C/TWINS confirm
1	4/10/75	4	1	22	71.6	N	degree C/TWINS confirm
1	4/10/75	5	1	22	71.6	N	degree C/TWINS confirm
1	4/10/75	6	1	22	71.6	N	degree C/TWINS confirm
1	4/10/75	7	1	22	71.6	N	degree C/TWINS confirm
1	4/10/75	8	1	20	68	N	degree C/TWINS confirm
1	4/10/75	9	1	20	68	N	degree C/TWINS confirm
1	4/10/75	10	1	20	68	N	degree C/TWINS confirm
1	4/10/75	11	1	20	68	N	degree C/TWINS confirm
1	4/10/75	12	1	20	68	N	degree C/TWINS confirm
1	7/25/75	1	1		71	N	
1	7/25/75	2	1		71	N	
1	7/25/75	3	1		71	N	
1	7/25/75	4	1		71	N	
1	7/25/75	5	1		71	N	
1	7/25/75	6	1		71	N	
1	7/25/75	7	1		71	N	
1	7/25/75	8	1		72	Y	
1	7/25/75	9	1		72	N	
1	7/25/75	10	1		72	N	
1	7/25/75	11	1		72	N	
1	7/25/75	12	1		72	N	
1	2/10/76	1	1		86	N	
1	2/10/76	2	1		99	Y	
1	2/10/76	3	1		90	N	
1	2/10/76	4	1		90	N	
1	2/10/76	5	1		90	N	
1	2/10/76	6	1		90	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-105							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	2/10/76	7	1		90	N	
1	2/10/76	8	1		83	N	
1	2/10/76	9	1		78	N	
1	2/10/76	10	1		78	N	
1	2/10/76	11	1		78	N	
1	2/10/76	12	1		74	N	
1	4/5/76	1	1		89	N	
1	4/5/76	2	1		90	Y	
1	4/5/76	3	1		89	N	
1	4/5/76	4	1		89	N	
1	4/5/76	5	1		88	N	
1	4/5/76	6	1		88	N	
1	4/5/76	7	1		88	N	
1	4/5/76	8	1		79	N	
1	4/5/76	9	1		75	N	
1	4/5/76	10	1		75	N	
1	4/5/76	11	1		75	N	
1	4/5/76	12	1		70	N	
1	7/20/76	1	1		79	N	
1	7/20/76	2	1		80	Y	
1	7/20/76	3	1		80	N	
1	7/20/76	4	1		79	N	
1	7/20/76	5	1		79	N	
1	7/20/76	6	1		79	N	
1	7/20/76	7	1		79	N	
1	7/20/76	8	1		75	N	
1	7/20/76	9	1		73	N	
1	7/20/76	10	1		73	N	
1	7/20/76	11	1		73	N	
1	7/20/76	12	1		73	N	
1	1/11/77	1	1		110	Y	
1	1/11/77	2	1		110	N	
1	1/11/77	3	1		110	N	
1	1/11/77	4	1		110	N	
1	1/11/77	5	1		110	N	
1	1/11/77	6	1		110	N	
1	1/11/77	7	1		108	N	
1	1/11/77	8	1		103	N	
1	1/11/77	9	1		103	N	
1	1/11/77	10	1		103	N	
1	1/11/77	11	1		102	N	
1	1/11/77	12	1		98	N	
1	4/26/77	1	1		78	N	
1	4/26/77	2	1		78	N	
1	4/26/77	3	1		79	N	
1	4/26/77	4	1		80	Y	
1	4/26/77	5	1		76	Y	
1	4/26/77	6	1		76	Y	
1	4/26/77	7	1		74	Y	
1	4/26/77	8	1		74	Y	
1	4/26/77	9	1		74	Y	
1	4/26/77	10	1		74	Y	
1	4/26/77	11	1		74	Y	
1	4/26/77	12	1		72	Y	
1	5/1/77	1	1		78	N	
1	5/1/77	2	1		79	Y	
1	5/1/77	3	1		79	N	
1	5/1/77	4	1		78	N	
1	5/1/77	5	1		77	N	
1	5/1/77	6	1		76	N	
1	5/1/77	7	1		75	N	
1	5/1/77	8	1		76	N	
1	5/1/77	9	1		74	N	
1	5/1/77	10	1		74	N	
1	5/1/77	11	1		73	N	
1	5/1/77	12	1		72	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-105 THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	7/26/77	1	1		73	Y	
1	7/26/77	2	1		70	N	
1	7/26/77	3	1		70	N	
1	7/26/77	4	1		70	N	
1	7/26/77	5	1		70	N	
1	7/26/77	6	1		70	N	
1	7/26/77	7	1		70	N	
1	7/26/77	8	1		70	N	
1	7/26/77	9	1		70	N	
1	7/26/77	10	1		70	N	
1	7/26/77	11	1		69	N	
1	7/26/77	12	1		69	N	
1	9/12/77	1	1		77	Y	
1	9/12/77	2	1		77	N	
1	9/12/77	3	1		77	N	
1	9/12/77	4	1		77	N	
1	9/12/77	5	1		77	N	
1	9/12/77	6	1		77	N	
1	9/12/77	7	1		76	N	
1	9/12/77	8	1		76	N	
1	9/12/77	9	1		77	N	
1	9/12/77	10	1		77	N	
1	9/12/77	11	1		77	N	
1	9/12/77	12	1		77	N	
1	10/24/77	1	1			Y	125.6 - suspect data (high)
1	10/24/77	3	1			N	125.6 - suspect data (high)
1	10/24/77	5	1			N	125.6 - suspect data (high)
1	10/24/77	7	1			N	125.6 - suspect data (high)
1	10/24/77	9	1			N	125.6 - suspect data (high)
1	11/30/77	1	1		91	Y	
1	11/30/77	2	1		90	N	
1	11/30/77	3	1		87	N	
1	11/30/77	4	1		86	N	
1	11/30/77	5	1		86	N	
1	11/30/77	6	1		86	N	
1	11/30/77	7	1		86	N	
1	11/30/77	8	1		86	N	
1	11/30/77	9	1		88	N	
1	11/30/77	10	1		88	N	
1	11/30/77	11	1		89	N	
1	11/30/77	12	1		89	N	
1	1/16/78	1	1		80	Y	
1	1/16/78	2	1		77	N	
1	1/16/78	3	1		72	N	
1	1/16/78	4	1		73	N	
1	1/16/78	5	1		73	N	
1	1/16/78	6	1		73	N	
1	1/16/78	7	1		73	N	
1	1/16/78	8	1		73	N	
1	1/16/78	9	1		73	N	
1	1/16/78	10	1		73	N	
1	1/16/78	11	1		73	N	
1	1/16/78	12	1		71	N	
1	2/26/78	1	1		77	Y	
1	2/26/78	2	1		74	N	
1	2/26/78	3	1		71	N	
1	2/26/78	4	1		70	N	
1	2/26/78	5	1		71	N	
1	2/26/78	6	1		71	N	
1	2/26/78	7	1		71	N	
1	2/26/78	8	1		71	N	
1	2/26/78	9	1		71	N	
1	2/26/78	10	1		71	N	
1	2/26/78	11	1		71	N	
1	2/26/78	12	1		69	N	
1	4/24/78	1	1		83	Y	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-105							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	4/24/78	2	1		83	N	
1	4/24/78	3	1		78	N	
1	4/24/78	4	1		81	N	
1	4/24/78	5	1		81	N	
1	4/24/78	6	1		81	N	
1	4/24/78	7	1		81	N	
1	4/24/78	8	1		81	N	
1	4/24/78	9	1		81	N	
1	4/24/78	10	1		80	N	
1	4/24/78	11	1		80	N	
1	4/24/78	12	1		78	N	
1	7/16/78	1	1		71	N	
1	7/16/78	2	1		72	Y	
1	7/16/78	3	1		70	N	
1	7/16/78	4	1		70	N	
1	7/16/78	5	1		70	N	
1	7/16/78	6	1		70	N	
1	7/16/78	7	1		70	N	
1	7/16/78	8	1		69	N	
1	7/16/78	9	1		69	N	
1	7/16/78	10	1		69	N	
1	7/16/78	11	1		69	N	
1	7/16/78	12	1		68	N	
1	7/16/78	1	2		72	N	
1	7/16/78	2	2		73	Y	
1	7/16/78	3	2		72	N	
1	7/16/78	4	2		72	N	
1	7/16/78	5	2		73	N	
1	7/16/78	6	2		72	N	
1	7/16/78	7	2		72	N	
1	7/16/78	8	2		72	N	
1	7/16/78	9	2		73	N	
1	7/16/78	10	2		73	N	
1	7/16/78	11	2		73	N	
1	7/16/78	12	2		72	N	
1	8/21/78	1	1		77	Y	
1	8/21/78	2	1		72	N	
1	8/21/78	3	1		72	N	
1	8/21/78	4	1		72	N	
1	8/21/78	5	1		71	N	
1	8/21/78	6	1		71	N	
1	8/21/78	7	1		71	N	
1	8/21/78	8	1		70	N	
1	8/21/78	9	1		70	N	
1	8/21/78	10	1		70	N	
1	8/21/78	11	1		70	N	
1	8/21/78	12	1		70	N	
1	9/11/78	1	1		77	N	
1	9/11/78	2	1		79	N	
1	9/11/78	3	1		80	N	
1	9/11/78	4	1		81	Y	
1	9/11/78	5	1		79	N	
1	9/11/78	6	1		80	N	
1	9/11/78	7	1		80	N	
1	9/11/78	8	1		80	N	
1	9/11/78	9	1		80	N	
1	9/11/78	10	1		80	N	
1	9/11/78	11	1		80	N	
1	9/11/78	12	1		80	N	
1	11/7/78	1	1		92	Y	
1	11/7/78	2	1		92	N	
1	11/7/78	3	1		92	N	
1	11/7/78	4	1		91	N	
1	11/7/78	5	1		91	N	
1	11/7/78	6	1		89	N	
1	11/7/78	7	1		89	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-105							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	11/7/78	8	1		89	N	
1	11/7/78	9	1		89	N	
1	11/7/78	10	1		88	N	
1	11/7/78	11	1		87	N	
1	11/7/78	12	1		87	N	
1	11/7/78	1	2		88	Y	
1	11/7/78	2	2		86	N	
1	11/7/78	3	2		88	N	
1	11/7/78	4	2		86	N	
1	11/7/78	5	2		87	N	
1	11/7/78	7	2		86	N	
1	11/7/78	8	2		88	N	
1	11/7/78	9	2		88	N	
1	11/7/78	10	2		82	N	
1	11/7/78	11	2		88	N	
1	11/7/78	12	2		86	N	
1	11/9/78	1	1		83	N	
1	11/9/78	2	1		84	Y	
1	11/9/78	3	1		82	N	
1	11/9/78	4	1		81	N	
1	11/9/78	5	1		81	N	
1	11/9/78	6	1		80	N	
1	11/9/78	7	1		80	N	
1	11/9/78	8	1		80	N	
1	11/9/78	9	1		80	N	
1	11/9/78	10	1		80	N	
1	11/9/78	11	1		80	N	
1	11/9/78	12	1		79	N	
1	12/5/78	1	1		80	N	
1	12/5/78	2	1		81	N	
1	12/5/78	3	1		81	N	
1	12/5/78	4	1		82	N	
1	12/5/78	5	1		82	N	
1	12/5/78	6	1		86	Y	
1	12/5/78	7	1		85	N	
1	12/5/78	8	1		81	N	
1	12/5/78	9	1		81	N	
1	12/5/78	10	1		82	N	
1	12/5/78	11	1		82	N	
1	12/5/78	12	1		80	N	
1	1/5/79	1	1		83	N	
1	1/5/79	2	1		85	Y	
1	1/5/79	3	1		82	N	
1	1/5/79	4	1		77	N	
1	1/5/79	5	1		71	N	
1	1/5/79	6	1		71	N	
1	1/5/79	7	1		71	N	
1	1/5/79	8	1		71	N	
1	1/5/79	9	1		71	N	
1	1/5/79	10	1		71	N	
1	1/5/79	11	1		71	N	
1	1/5/79	12	1		74	N	
1	2/7/79	1	1		88	Y	
1	2/7/79	2	1		87	N	
1	2/7/79	3	1		83	N	
1	2/7/79	4	1		77	N	
1	2/7/79	5	1		77	N	
1	2/7/79	6	1		77	N	
1	2/7/79	7	1		77	N	
1	2/7/79	8	1		77	N	
1	2/7/79	9	1		77	N	
1	2/7/79	10	1		77	N	
1	2/7/79	11	1		76	N	
1	2/7/79	12	1		74	N	
1	3/8/79	1	1		85	Y	
1	3/8/79	2	1		84	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-105							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	3/8/79	3	1		79	N	
1	3/8/79	4	1		74	N	
1	3/8/79	5	1		73	N	
1	3/8/79	6	1		73	N	
1	3/8/79	7	1		73	N	
1	3/8/79	8	1		72	N	
1	3/8/79	9	1		73	N	
1	3/8/79	10	1		73	N	
1	3/8/79	11	1		73	N	
1	3/8/79	12	1		71	N	
1	4/7/79	1	1		82	N	
1	4/7/79	2	1		83	Y	
1	4/7/79	3	1		79	N	
1	4/7/79	4	1		75	N	
1	4/7/79	5	1		71	N	
1	4/7/79	6	1		71	N	
1	4/7/79	7	1		71	N	
1	4/7/79	8	1		71	N	
1	4/7/79	9	1		71	N	
1	4/7/79	10	1		70	N	
1	4/7/79	11	1		70	N	
1	4/7/79	12	1		69	N	
1	5/2/79	1	1		67	Y	
1	5/2/79	2	1		65	N	
1	5/2/79	3	1		61	N	
1	5/2/79	4	1		58	N	
1	5/2/79	5	1		55	N	
1	5/2/79	6	1		54	N	
1	5/2/79	7	1		54	N	
1	5/2/79	8	1		53	N	
1	5/2/79	9	1		53	N	
1	5/2/79	10	1		52	N	
1	5/2/79	11	1		52	N	
1	5/2/79	12	1		51	N	
1	7/1/79	1	1		78	Y	
1	7/1/79	2	1		76	N	
1	7/1/79	3	1		75	N	
1	7/1/79	4	1		73	N	
1	7/1/79	5	1		72	N	
1	7/1/79	6	1		72	N	
1	7/1/79	7	1		72	N	
1	7/1/79	8	1		71	N	
1	7/1/79	9	1		71	N	
1	7/1/79	10	1		71	N	
1	7/1/79	11	1		71	N	
1	7/1/79	12	1		74	N	
1	8/12/79	1	1		84	N	
1	8/12/79	2	1		85	N	
1	8/12/79	3	1		86	Y	
1	8/12/79	4	1		85	N	
1	8/12/79	5	1		84	N	
1	8/12/79	6	1		81	N	
1	8/12/79	7	1		81	N	
1	8/12/79	8	1		81	N	
1	8/12/79	9	1		81	N	
1	8/12/79	10	1		81	N	
1	8/12/79	11	1		81	N	
1	8/12/79	12	1		81	N	
1	9/4/79	1	1		76	N	
1	9/4/79	2	1		78	N	
1	9/4/79	3	1		79	N	
1	9/4/79	4	1		80	N	
1	9/4/79	5	1		80	N	
1	9/4/79	6	1		81	Y	
1	9/4/79	7	1		77	N	
1	9/4/79	8	1		75	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-105							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	9/4/79	9	1		75	N	
1	9/4/79	10	1		75	N	
1	9/4/79	11	1		76	N	
1	9/4/79	12	1		76	N	
1	12/23/79	1	1		76	N	
1	12/23/79	2	1		77	Y	
1	12/23/79	3	1		76	N	
1	12/23/79	4	1		71	N	
1	12/23/79	5	1		72	N	
1	12/23/79	6	1		72	N	
1	12/23/79	7	1		72	N	
1	12/23/79	11	1		71	N	
1	12/23/79	12	1		69	N	
1	1/9/80	1	1		90	Y	
1	1/9/80	2	1		87	N	
1	1/9/80	3	1		87	N	
1	1/9/80	4	1		82	N	
1	1/9/80	5	1		81	N	
1	1/9/80	6	1		82	N	
1	1/9/80	7	1		82	N	
1	1/9/80	8	1		82	N	
1	1/9/80	9	1		83	N	
1	1/9/80	10	1		83	N	
1	1/9/80	11	1		83	N	
1	1/9/80	12	1		83	N	
1	2/9/80	1	1		87	Y	
1	2/9/80	2	1		83	N	
1	2/9/80	3	1		75	N	
1	2/9/80	4	1		75	N	
1	2/9/80	5	1		75	N	
1	2/9/80	6	1		75	N	
1	2/9/80	7	1		75	N	
1	2/9/80	8	1		76	N	
1	2/9/80	9	1		76	N	
1	2/9/80	10	1		77	N	
1	2/9/80	11	1		77	N	
1	2/9/80	12	1		77	N	
1	4/4/80	1	1		68	Y	
1	4/4/80	2	1		66	N	
1	4/4/80	3	1		60	N	
1	4/4/80	4	1		60	N	
1	4/4/80	5	1		59	N	
1	4/4/80	6	1		59	N	
1	4/4/80	7	1		59	N	
1	4/4/80	8	1		59	N	
1	4/4/80	9	1		58	N	
1	4/4/80	10	1		58	N	
1	4/4/80	11	1		58	N	
1	4/4/80	12	1		57	N	
1	5/4/80	1	1		58	Y	
1	5/4/80	2	1		56	N	
1	5/4/80	3	1		51	N	
1	5/4/80	4	1		51	N	
1	5/4/80	5	1		48	N	
1	5/4/80	6	1		47	N	
1	5/4/80	7	1		45	N	
1	5/4/80	8	1		44	N	
1	5/4/80	9	1		43	N	
1	5/4/80	10	1		41	N	
1	5/4/80	11	1		41	N	
1	5/4/80	12	1		37	N	
1	5/18/80	1	1		66	N	
1	5/18/80	2	1		65	N	
1	5/18/80	3	1		67	Y	
1	5/18/80	4	1		65	N	
1	5/18/80	5	1		65	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-105							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	5/18/80	6	1		65	N	
1	5/18/80	7	1		65	N	
1	5/18/80	8	1		65	N	
1	5/18/80	9	1		65	N	
1	5/18/80	10	1		65	N	
1	5/18/80	11	1		65	N	
1	5/18/80	12	1		64	N	
1	6/11/80	1	1		69	N	
1	6/11/80	2	1		70	Y	
1	6/11/80	3	1		68	N	
1	6/11/80	4	1		68	N	
1	6/11/80	5	1		68	N	
1	6/11/80	6	1		68	N	
1	6/11/80	7	1		68	N	
1	6/11/80	8	1		68	N	
1	6/11/80	9	1		68	N	
1	6/11/80	10	1		68	N	
1	6/11/80	11	1		68	N	
1	6/11/80	12	1		67	N	
1	6/11/80	13	1		67	N	
1	6/11/80	14	1		67	N	
1	7/5/80	1	1		77	N	
1	7/5/80	2	1		78	Y	
1	7/5/80	3	1		77	N	
1	7/5/80	4	1		77	N	
1	7/5/80	5	1		77	N	
1	7/5/80	6	1		77	N	
1	7/5/80	7	1		77	N	
1	7/5/80	8	1		77	N	
1	7/5/80	9	1		77	N	
1	7/5/80	10	1		77	N	
1	7/5/80	11	1		77	N	
1	7/5/80	12	1		77	N	
1	7/5/80	13	1		77	N	
1	7/5/80	14	1		77	N	
1	8/12/80	1	1		76	N	
1	8/12/80	2	1		77	N	
1	8/12/80	3	1		80	N	
1	8/12/80	4	1		81	N	
1	8/12/80	5	1		82	Y	
1	8/12/80	6	1		81	N	
1	8/12/80	7	1		80	N	
1	8/12/80	8	1		80	N	
1	8/12/80	9	1		80	N	
1	8/12/80	10	1		80	N	
1	8/12/80	11	1		80	N	
1	8/12/80	12	1		80	N	
1	9/11/80	1	1		77	N	
1	9/11/80	2	1		82	Y	
1	9/11/80	3	1		80	N	
1	9/11/80	4	1		79	N	
1	9/11/80	5	1		79	N	
1	9/11/80	6	1		79	N	
1	9/11/80	7	1		80	N	
1	9/11/80	8	1		80	N	
1	9/11/80	9	1		80	N	
1	9/11/80	10	1		80	N	
1	9/11/80	11	1		80	N	
1	9/11/80	12	1		80	N	
1	10/26/80	1	1		81	N	
1	10/26/80	2	1		82	N	
1	10/26/80	3	1		83	Y	
1	10/26/80	4	1		82	N	
1	10/26/80	5	1		80	N	
1	10/26/80	6	1		80	N	
1	10/26/80	7	1		80	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-105							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y= MAX TEMP	COMMENTS
1	10/26/80	8	1		80	N	
1	10/26/80	9	1		80	N	
1	10/26/80	10	1		80	N	
1	10/26/80	11	1		80	N	
1	10/26/80	12	1		80	N	
1	11/14/80	1	1		77	N	
1	11/14/80	2	1		78	N	
1	11/14/80	3	1		78	N	
1	11/14/80	4	1		78	N	
1	11/14/80	5	1		78	N	
1	11/14/80	6	1		78	N	
1	11/14/80	7	1		79	Y	
1	11/14/80	8	1		79	N	
1	11/14/80	9	1		79	N	
1	11/14/80	10	1		79	N	
1	11/14/80	11	1		79	N	
1	11/14/80	12	1		79	N	
1	11/14/80	13	1		79	N	
1	11/14/80	14	1		76	N	
1	1/10/81	1	1		87	Y	
1	1/10/81	2	1		84	N	
1	1/10/81	3	1		85	N	
1	1/10/81	4	1		85	N	
1	1/10/81	5	1			N	
1	1/10/81	6	1			N	
1	1/10/81	7	1			N	
1	1/10/81	8	1			N	
1	1/10/81	9	1			N	
1	1/10/81	10	1			N	
1	1/10/81	11	1		84	N	
1	1/10/81	12	1		82	N	
1	8/10/81	1	1		69	Y	
1	8/10/81	2	1		69	N	
1	8/10/81	3	1		69	N	
1	8/10/81	4	1		69	N	
1	8/10/81	5	1		69	N	
1	8/10/81	6	1		69	N	
1	8/10/81	7	1		69	N	
1	8/10/81	8	1		69	N	
1	8/10/81	9	1		69	N	
1	8/10/81	10	1		69	N	
1	8/10/81	11	1		69	N	
1	8/10/81	12	1		69	N	
1	11/14/81	1	1		74	N	
1	11/14/81	2	1		75	Y	
1	11/14/81	3	1		75	N	
1	11/14/81	4	1		75	N	
1	11/14/81	5	1		75	N	
1	11/14/81	6	1		75	N	
1	11/14/81	7	1		75	N	
1	11/14/81	8	1		75	N	
1	11/14/81	9	1		75	N	
1	11/14/81	10	1		75	N	
1	11/14/81	11	1		75	N	
1	11/14/81	12	1		75	N	
1	1/19/82	1	1		79	Y	
1	1/19/82	2	1		79	N	
1	1/19/82	3	1		76	N	
1	1/19/82	4	1		76	N	
1	1/19/82	5	1		76	N	
1	1/19/82	6	1		76	N	
1	1/19/82	7	1		76	N	
1	1/19/82	8	1		76	N	
1	1/19/82	9	1		76	N	
1	1/19/82	10	1		75	N	
1	1/19/82	11	1		75	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-105							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	1/19/82	12	1		73	N	
1	4/6/82	1	1		67	Y	
1	4/6/82	2	1		65	N	
1	4/6/82	3	1		64	N	
1	4/6/82	4	1		64	N	
1	4/6/82	5	1		64	N	
1	4/6/82	6	1		64	N	
1	4/6/82	7	1		64	N	
1	4/6/82	8	1		64	N	
1	4/6/82	9	1		64	N	
1	4/6/82	11	1		64	N	
1	4/6/82	12	1		63	N	
1	5/4/82	1	1		71	Y	
1	5/4/82	2	1		70	N	
1	5/4/82	3	1		70	N	
1	5/4/82	4	1		70	N	
1	5/4/82	5	1		70	N	
1	5/4/82	6	1		70	N	
1	5/4/82	7	1		69	N	
1	5/4/82	8	1		69	N	
1	5/4/82	9	1		69	N	
1	5/4/82	10	1		69	N	
1	5/4/82	11	1		68	N	
1	5/4/82	12	1		67	N	
1	6/9/82	1	1		65	Y	
1	6/9/82	2	1		64	N	
1	6/9/82	3	1		63	N	
1	6/9/82	4	1		63	N	
1	6/9/82	5	1		63	N	
1	6/9/82	6	1		63	N	
1	6/9/82	7	1		63	N	
1	6/9/82	8	1		63	N	
1	6/9/82	9	1		63	N	
1	6/9/82	10	1		63	N	
1	6/9/82	11	1		63	N	
1	6/9/82	12	1		63	N	
1	7/13/82	1	1		71	N	
1	7/13/82	2	1		71	N	
1	7/13/82	3	1		71	N	
1	7/13/82	4	1		71	N	
1	7/13/82	5	1		71	N	
1	7/13/82	6	1		71	N	
1	7/13/82	7	1		71	N	
1	7/13/82	8	1		71	N	
1	7/13/82	9	1		71	N	
1	7/13/82	10	1		72	Y	
1	7/13/82	11	1		72	N	
1	7/13/82	12	1		72	N	
1	8/10/82	1	1		84	N	
1	8/10/82	2	1		84	N	
1	8/10/82	3	1		85	Y	
1	8/10/82	4	1		85	N	
1	8/10/82	5	1		84	N	
1	8/10/82	6	1		84	N	
1	8/10/82	7	1		84	N	
1	8/10/82	8	1		84	N	
1	8/10/82	9	1		84	N	
1	8/10/82	10	1		84	N	
1	8/10/82	11	1		84	N	
1	8/10/82	12	1		84	N	
1	9/9/82	1	1		81	N	
1	9/9/82	2	1		82	N	
1	9/9/82	3	1		82	N	
1	9/9/82	4	1		82	N	
1	9/9/82	5	1		82	N	
1	9/9/82	6	1		85	Y	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-105							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	9/9/82	7	1		83	N	
1	9/9/82	8	1		83	N	
1	9/9/82	9	1		83	N	
1	9/9/82	10	1		81	N	
1	9/11/82	11	1		81	N	
1	9/11/82	12	1		81	N	
1	9/11/82	13	1		81	N	
1	9/11/82	14	1		81	N	
1	10/16/82	1	1		72	N	
1	10/16/82	2	1		73	Y	
1	10/16/82	3	1		73	N	
1	10/16/82	4	1		73	N	
1	10/16/82	5	1		73	N	
1	10/16/82	6	1		73	N	
1	10/16/82	7	1		73	N	
1	10/16/82	8	1		73	N	
1	10/16/82	9	1		73	N	
1	10/16/82	10	1		73	N	
1	10/16/82	11	1		73	N	
1	10/16/82	12	1		73	N	
1	11/4/82	1	1		77	Y	
1	11/4/82	2	1		76	N	
1	11/4/82	3	1		76	N	
1	11/4/82	4	1		74	N	
1	11/4/82	5	1		74	N	
1	11/4/82	6	1		74	N	
1	11/4/82	7	1		75	N	
1	11/4/82	8	1		74	N	
1	11/4/82	9	1		75	N	
1	11/4/82	10	1		75	N	
1	11/4/82	11	1		76	N	
1	11/4/82	12	1		75	N	
1	1/3/83	1	1		81	Y	
1	1/3/83	2	1		79	N	
1	1/3/83	3	1		77	N	
1	1/3/83	4	1		76	N	
1	1/3/83	5	1		76	N	
1	1/3/83	6	1		76	N	
1	1/3/83	7	1		75	N	
1	1/3/83	8	1		75	N	
1	1/3/83	9	1		74	N	
1	1/3/83	10	1		74	N	
1	1/3/83	11	1		74	N	
1	1/3/83	12	1		71	N	
1	1/8/83	1	1		69	Y	
1	1/8/83	2	1		67	N	
1	1/8/83	3	1		67	N	
1	1/8/83	4	1		67	N	
1	1/8/83	5	1		67	N	
1	1/8/83	6	1		67	N	
1	1/8/83	7	1		67	N	
1	1/8/83	8	1		67	N	
1	1/8/83	9	1		67	N	
1	1/8/83	10	1		67	N	
1	1/8/83	11	1		66	N	
1	1/8/83	12	1		66	N	
1	1/8/83	13	1		63	N	
1	1/8/83	14	1		63	N	
1	2/5/83	1	1		70	Y	
1	2/5/83	2	1		68	N	
1	2/5/83	3	1		68	N	
1	2/5/83	4	1		66	N	
1	2/5/83	5	1		67	N	
1	2/5/83	6	1		67	N	
1	2/5/83	7	1		67	N	
1	2/5/83	8	1		66	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-105							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	2/5/83	9	1		66	N	
1	2/5/83	10	1		66	N	
1	2/5/83	11	1		66	N	
1	2/5/83	12	1		65	N	
1	2/5/83	13	1		65	N	
1	2/5/83	14	1		65	N	
1	3/23/83	1	1		81	Y	
1	3/23/83	2	1		80	N	
1	3/23/83	3	1		74	N	
1	3/23/83	4	1		80	N	
1	3/23/83	5	1		80	N	
1	3/23/83	6	1		79	N	
1	3/23/83	7	1		79	N	
1	3/23/83	8	1		79	N	
1	3/23/83	9	1		79	N	
1	3/23/83	10	1		79	N	
1	3/23/83	11	1		79	N	
1	3/23/83	12	1		78	N	
1	3/23/83	13	1		78	N	
1	3/23/83	14	1		78	N	
1	4/3/83	1	1		65	Y	
1	4/3/83	2	1		64	N	
1	4/3/83	3	1		64	N	
1	4/3/83	4	1		64	N	
1	4/3/83	5	1		64	N	
1	4/3/83	6	1		64	N	
1	4/3/83	7	1		63	N	
1	4/3/83	8	1		63	N	
1	4/3/83	9	1		63	N	
1	4/3/83	10	1		62	N	
1	4/3/83	11	1		62	N	
1	4/3/83	12	1		62	N	
1	4/3/83	13	1		62	N	
1	5/7/83	1	1		80	N	
1	5/7/83	2	1		80	N	
1	5/7/83	3	1		81	Y	
1	5/7/83	4	1		80	N	
1	5/7/83	5	1		79	N	
1	5/7/83	6	1		78	N	
1	5/7/83	7	1		76	N	
1	5/7/83	8	1		75	N	
1	5/7/83	9	1		74	N	
1	5/7/83	10	1		74	N	
1	5/7/83	11	1		73	N	
1	5/7/83	12	1		71	N	
1	6/9/83	1	1		66	Y	
1	6/9/83	2	1		66	N	
1	6/9/83	3	1		66	N	
1	6/9/83	4	1		66	N	
1	6/9/83	5	1		66	N	
1	6/9/83	6	1		66	N	
1	6/9/83	7	1		66	N	
1	6/9/83	8	1		66	N	
1	6/9/83	9	1		65	N	
1	6/9/83	10	1		65	N	
1	6/9/83	11	1		65	N	
1	6/9/83	12	1		65	N	
1	7/11/83	1	1		68	N	
1	7/11/83	2	1		69	Y	
1	7/11/83	3	1		69	N	
1	7/11/83	4	1		69	N	
1	7/11/83	5	1		69	N	
1	7/11/83	6	1		69	N	
1	7/11/83	7	1		69	N	
1	7/11/83	8	1		69	N	
1	7/11/83	9	1		68	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-105							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	7/11/83	10	1		68	N	
1	7/11/83	11	1		68	N	
1	7/11/83	12	1		68	N	
1	8/6/83	1	1		67	N	
1	8/6/83	2	1		68	N	
1	8/6/83	3	1		68	N	
1	8/6/83	4	1		68	N	
1	8/6/83	5	1		68	N	
1	8/6/83	6	1		68	N	
1	8/6/83	7	1		68	N	
1	8/6/83	8	1		68	N	
1	8/6/83	9	1		69	Y	
1	8/6/83	10	1		69	N	
1	8/6/83	11	1		69	N	
1	8/6/83	12	1		69	N	
1	9/10/83	1	1		70	N	
1	9/10/83	2	1		71	N	
1	9/10/83	3	1		71	N	
1	9/10/83	4	1		71	N	
1	9/10/83	5	1		71	N	
1	9/10/83	6	1		71	N	
1	9/10/83	7	1		71	N	
1	9/10/83	8	1		71	N	
1	9/10/83	9	1		71	N	
1	9/10/83	10	1		71	N	
1	9/10/83	11	1		71	N	
1	9/10/83	12	1		72	Y	
1	10/13/83	1	1		71	Y	
1	10/13/83	2	1		71	N	
1	10/13/83	3	1		71	N	
1	10/13/83	4	1		71	N	
1	10/13/83	5	1		71	N	
1	10/13/83	6	1		71	N	
1	10/13/83	7	1		71	N	
1	10/13/83	8	1		71	N	
1	10/13/83	9	1		71	N	
1	10/13/83	10	1		71	N	
1	10/13/83	11	1		71	N	
1	10/13/83	12	1		71	N	
1	11/8/83	1	1		59	N	
1	11/8/83	2	1		58	N	
1	11/8/83	3	1		58	N	
1	11/8/83	4	1		58	N	
1	11/8/83	5	1		58	N	
1	11/8/83	6	1		58	N	
1	11/8/83	7	1		59	N	
1	11/8/83	8	1		59	N	
1	11/8/83	9	1		59	N	
1	11/8/83	10	1		60	Y	
1	11/8/83	11	1		60	N	
1	11/8/83	12	1		59	N	
1	2/11/84	1	1		76	Y	
1	2/11/84	2	1		72	N	
1	2/11/84	3	1		72	N	
1	2/11/84	4	1		72	N	
1	2/11/84	5	1		72	N	
1	2/11/84	6	1		72	N	
1	2/11/84	7	1		71	N	
1	2/11/84	8	1		72	N	
1	2/11/84	9	1		72	N	
1	2/11/84	10	1		72	N	
1	2/11/84	11	1		72	N	
1	2/11/84	12	1		69	N	
1	2/14/84	1	1		58	Y	
1	2/14/84	2	1		55	N	
1	2/14/84	3	1		54	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-105							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	2/14/84	4	1		54	N	
1	2/14/84	5	1		54	N	
1	2/14/84	6	1		54	N	
1	2/14/84	7	1		54	N	
1	2/14/84	8	1		54	N	
1	2/14/84	9	1		54	N	
1	2/14/84	10	1		54	N	
1	2/14/84	11	1		54	N	
1	2/14/84	12	1		52	N	
1	2/14/84	13	1		52	N	
1	2/14/84	14	1		52	N	
1	4/7/84	1	1		54	Y	
1	4/7/84	2	1		52	N	
1	4/7/84	3	1		51	N	
1	4/7/84	4	1		52	N	
1	4/7/84	5	1		52	N	
1	4/7/84	6	1		52	N	
1	4/7/84	7	1		52	N	
1	4/7/84	8	1		52	N	
1	4/7/84	9	1		52	N	
1	4/7/84	10	1		52	N	
1	4/7/84	11	1		51	N	
1	4/7/84	12	1		51	N	
1	4/7/84	13	1		51	N	
1	4/7/84	14	1		51	N	
1	6/16/84	1	1			N	O/S
1	9/3/84	1	1		88.5	Y	
1	9/3/84	2	1		88	N	
1	9/3/84	3	1		87	N	
1	9/3/84	4	1		87	N	
1	9/3/84	5	1		87	N	
1	9/3/84	6	1		87	N	
1	9/3/84	7	1		87	N	
1	9/3/84	8	1		87	N	
1	9/3/84	9	1		86	N	
1	9/3/84	10	1		86	N	
1	9/3/84	11	1		86	N	
1	9/3/84	12	1		87	N	
1	9/3/84	13	1		87	N	
1	9/3/84	14	1		87	N	
1	4/1/85	1	1		65	Y	
1	4/1/85	2	1		63	N	
1	4/1/85	3	1		62	N	
1	4/1/85	4	1		62	N	
1	4/1/85	5	1		62	N	
1	4/1/85	6	1		62	N	
1	4/1/85	7	1		62	N	
1	4/1/85	8	1		62	N	
1	4/1/85	9	1		62	N	
1	4/1/85	10	1		62	N	
1	4/1/85	11	1		61	N	
1	4/1/85	12	1		60	N	
1	4/1/85	13	1		60	N	
1	4/1/85	14	1		60	N	
1	5/7/85	1	1		63	Y	
1	5/7/85	2	1		61	N	
1	5/7/85	3	1		61	N	
1	5/7/85	4	1		61	N	
1	5/7/85	5	1		61	N	
1	5/7/85	6	1		61	N	
1	5/7/85	7	1		61	N	
1	5/7/85	8	1		61	N	
1	5/7/85	9	1		61	N	
1	5/7/85	10	1		61	N	
1	5/7/85	11	1		61	N	
1	5/7/85	12	1		60	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-105							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	6/4/85	1	1		64	Y	
1	6/4/85	2	1		64	N	
1	6/4/85	3	1		64	N	
1	6/4/85	4	1		63	N	
1	6/4/85	5	1		63	N	
1	6/4/85	6	1		63	N	
1	6/4/85	7	1		63	N	
1	6/4/85	8	1		63	N	
1	6/4/85	9	1		63	N	
1	6/4/85	10	1		62	N	
1	6/4/85	12	1		62	N	
1	6/4/85	13	1		62	N	
1	6/4/85	14	1		62	N	
1	6/10/85	1	1		67	Y	
1	6/10/85	2	1		67	N	
1	6/10/85	3	1		66	N	
1	6/10/85	4	1		66	N	
1	6/10/85	5	1		66	N	
1	6/10/85	6	1		66	N	
1	6/10/85	7	1		66	N	
1	6/10/85	8	1		66	N	
1	6/10/85	9	1		66	N	
1	6/10/85	10	1		66	N	
1	6/10/85	11	1		66	N	
1	6/10/85	12	1		66	N	
1	6/10/85	13	1		66	N	
1	6/10/85	14	1		66	N	
1	7/2/85	1	1		63	Y	
1	7/2/85	2	1		63	N	
1	7/2/85	3	1		63	N	
1	7/2/85	4	1		63	N	
1	7/2/85	5	1		63	N	
1	7/2/85	6	1		63	N	
1	7/2/85	7	1		62	N	
1	7/2/85	8	1		62	N	
1	7/2/85	9	1		63	N	
1	7/2/85	10	1		62	N	
1	7/2/85	11	1		62	N	
1	7/2/85	12	1		62	N	
1	8/5/85	1	1		63	Y	
1	8/5/85	2	1		63	N	
1	8/5/85	3	1		63	N	
1	8/5/85	4	1		63	N	
1	8/5/85	5	1		63	N	
1	8/5/85	6	1		63	N	
1	9/1/85	1	1			N	36 - suspect data (low)
1	9/1/85	2	1			N	36 - suspect data (low)
1	9/1/85	3	1			N	36 - suspect data (low)
1	9/1/85	4	1			N	35 - suspect data (low)
1	9/1/85	5	1			N	34 - suspect data (low)
1	9/1/85	6	1			N	34 - suspect data (low)
1	9/1/85	7	1			N	34 - suspect data (low)
1	9/1/85	8	1			N	45 - suspect data (low)
1	9/1/85	9	1			N	50 - suspect data (low)
1	9/1/85	10	1			N	50 - suspect data (low)
1	9/1/85	11	1			Y	51 - suspect data (low)
1	1/6/86	1	1		67.4	Y	
1	1/6/86	2	1		65.9	N	
1	1/6/86	3	1		65.6	N	
1	1/6/86	4	1		65.5	N	
1	1/6/86	5	1		65.4	N	
1	1/6/86	6	1		65.3	N	
1	1/6/86	7	1		65.3	N	
1	1/6/86	8	1		65.2	N	
1	1/6/86	9	1		65.2	N	
1	1/6/86	10	1		65.2	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-105							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	1/6/86	11	1		64.9	N	
1	1/6/86	12	1		63	N	
1	3/4/86	1	1		65.6	Y	
1	3/4/86	2	1		61.4	N	
1	3/4/86	3	1		61.1	N	
1	3/4/86	4	1		60.9	N	
1	3/4/86	5	1		60.4	N	
1	3/4/86	6	1		60.3	N	
1	3/4/86	7	1		60.1	N	
1	3/4/86	8	1		60.1	N	
1	3/4/86	9	1		60.2	N	
1	3/4/86	10	1		60.4	N	
1	3/4/86	11	1		60.6	N	
1	3/4/86	12	1		60.1	N	
1	4/7/86	1	1		63	Y	
1	4/7/86	2	1		62	N	
1	4/7/86	3	1		62	N	
1	4/7/86	4	1		62	N	
1	4/7/86	5	1		62	N	
1	4/7/86	6	1		62	N	
1	4/7/86	7	1		63	N	
1	4/7/86	8	1		63	N	
1	4/7/86	9	1		63	N	
1	4/7/86	10	1		62	N	
1	4/7/86	11	1		63	N	
1	4/7/86	12	1		62	N	
1	4/7/86	13	1		62	N	
1	4/7/86	14	1		62	N	
1	5/11/86	1	1		70	Y	
1	5/11/86	2	1		68	N	
1	5/11/86	3	1		68	N	
1	5/11/86	4	1		68	N	
1	5/11/86	5	1		68	N	
1	5/11/86	6	1		68	N	
1	5/11/86	7	1		68	N	
1	5/11/86	8	1		68	N	
1	5/11/86	9	1		68	N	
1	5/11/86	10	1		68	N	
1	5/11/86	11	1		67	N	
1	5/11/86	12	1		66	N	
1	5/11/86	13	1		66	N	
1	5/11/86	14	1		66	N	
1	6/3/86	1	1		64	Y	
1	6/3/86	2	1		63	N	
1	6/3/86	3	1		63	N	
1	6/3/86	4	1		63	N	
1	6/3/86	5	1		63	N	
1	6/3/86	6	1		62	N	
1	6/3/86	7	1		62	N	
1	6/3/86	8	1		62	N	
1	6/3/86	9	1		62	N	
1	6/3/86	10	1		63	N	
1	6/3/86	11	1		63	N	
1	6/3/86	12	1		63	N	
1	7/7/86	1	1		96.1	N	
1	7/7/86	2	1		96	N	
1	7/7/86	3	1		96	N	
1	7/7/86	4	1		96.1	N	
1	7/7/86	5	1		89.6	N	
1	7/7/86	6	1		96.3	N	
1	7/7/86	7	1		96.4	N	
1	7/7/86	8	1		96.4	N	
1	7/7/86	9	1		96.5	N	
1	7/7/86	10	1		97	N	
1	7/7/86	11	1		96.6	N	
1	7/7/86	12	1		96.7	Y	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-105							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	8/4/86	1	1		66	N	
1	8/4/86	2	1		67	Y	
1	8/4/86	3	1		67	N	
1	8/4/86	4	1		67	N	
1	8/4/86	5	1		65	N	
1	8/4/86	6	1		67	N	
1	8/4/86	7	1		67	N	
1	8/4/86	8	1		67	N	
1	8/4/86	9	1		66	N	
1	8/4/86	10	1		66	N	
1	8/4/86	11	1		67	N	
1	8/4/86	12	1		66	N	
1	9/1/86	1	1		75	Y	
1	9/1/86	2	1		75	N	
1	9/1/86	3	1		75	N	
1	9/1/86	4	1		71	N	
1	9/1/86	5	1		75	N	
1	9/1/86	6	1		75	N	
1	9/1/86	7	1		75	N	
1	9/1/86	8	1		74	N	
1	9/1/86	9	1		74	N	
1	9/1/86	10	1		74	N	
1	9/1/86	11	1		74	N	
1	9/1/86	12	1		74	N	
1	10/6/86	1	1		69	N	
1	10/6/86	2	1		70	N	
1	10/6/86	3	1		70	N	
1	10/6/86	4	1		70	N	
1	10/6/86	5	1		77	Y	
1	10/6/86	6	1		70	N	
1	10/6/86	7	1		69	N	
1	10/6/86	8	1		69	N	
1	10/6/86	9	1		69	N	
1	10/6/86	10	1		69	N	
1	10/6/86	11	1		70	N	
1	10/6/86	12	1		70	N	
1	11/6/86	1	1			N	49.9 - suspect data (low)
1	11/6/86	2	1			N	49.9 - suspect data (low)
1	11/6/86	3	1			N	49.9 - suspect data (low)
1	11/6/86	4	1			N	49.9 - suspect data (low)
1	11/6/86	5	1			N	33.9 - suspect data (low)
1	11/6/86	6	1			N	50.3 - suspect data (low)
1	11/6/86	7	1			Y	50.4 - suspect data (low)
1	11/6/86	8	1			N	50.3 - suspect data (low)
1	11/6/86	10	1			N	49.8 - suspect data (low)
1	11/6/86	11	1			N	49.3 - suspect data (low)
1	11/6/86	12	1			N	48.7 - suspect data (low)
1	12/2/86	1	1		70	N	
1	12/2/86	2	1		69	N	
1	12/2/86	3	1		69	N	
1	12/2/86	4	1		69	N	
1	12/2/86	5	1		76	Y	
1	12/2/86	6	1		70	N	
1	12/2/86	7	1		70	N	
1	12/2/86	8	1		70	N	
1	12/2/86	9	1		70	N	
1	12/2/86	10	1		70	N	
1	12/2/86	11	1		70	N	
1	12/2/86	12	1		70	N	
1	12/2/86	1	2		73	Y	
1	12/2/86	2	2		72	N	
1	12/2/86	3	2		72	N	
1	12/2/86	4	2		72	N	
1	12/2/86	5	2		72	N	
1	12/2/86	6	2		72	N	
1	12/2/86	7	2		72	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-105							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	12/2/86	8	2		72	N	
1	12/2/86	9	2		72	N	
1	12/2/86	10	2		71	N	
1	12/2/86	11	2		71	N	
1	12/2/86	12	2		70	N	
1	12/2/86	13	2		70	N	
1	12/2/86	14	2		70	N	
1	2/3/87	1	1		68	N	
1	2/3/87	2	1		66	N	
1	2/3/87	3	1		66	N	
1	2/3/87	4	1		66	N	
1	2/3/87	5	1		72	N	
1	2/3/87	6	1		65	N	
1	2/3/87	7	1		65	N	
1	2/3/87	8	1		65	N	
1	2/3/87	9	1		65	N	
1	2/3/87	10	1		65	N	
1	2/3/87	11	1		65	N	
1	2/3/87	12	1		64	N	
1	4/13/87	1	1		63	N	
1	4/13/87	2	1		62	N	
1	4/13/87	3	1		62	N	
1	4/13/87	4	1		64	N	
1	4/13/87	5	1		65	Y	
1	4/13/87	6	1		62	N	
1	4/13/87	7	1		62	N	
1	4/13/87	8	1		62	N	
1	4/13/87	9	1		62	N	
1	4/13/87	10	1		62	N	
1	4/13/87	11	1		62	N	
1	4/13/87	12	1		61	N	
1	5/3/87	1	1		60	N	
1	5/3/87	2	1		60	N	
1	5/3/87	3	1		60	N	
1	5/3/87	4	1		60	N	
1	5/3/87	5	1		61	Y	
1	5/3/87	6	1		61	N	
1	5/3/87	7	1		61	N	
1	5/3/87	8	1		60	N	
1	5/3/87	9	1		60	N	
1	5/3/87	10	1		60	N	
1	5/3/87	11	1		60	N	
1	5/3/87	12	1		60	N	
1	5/3/87	13	1		60	N	
1	5/3/87	14	1		60	N	
1	6/1/87	1	1		64	N	
1	6/1/87	2	1		65	N	
1	6/1/87	3	1		65	N	
1	6/1/87	4	1		65	N	
1	6/1/87	5	1		69	Y	
1	6/1/87	6	1		65	N	
1	6/1/87	7	1		65	N	
1	6/1/87	8	1		65	N	
1	6/1/87	9	1		65	N	
1	6/1/87	10	1		65	N	
1	6/1/87	11	1		65	N	
1	6/1/87	12	1		64	N	
1	7/6/87	1	1		67.2	N	
1	7/6/87	2	1		67.3	Y	
1	7/6/87	3	1		67.2	N	
1	7/6/87	4	1		67.1	N	
1	7/6/87	5	1		62.1	N	
1	7/6/87	6	1		67.1	N	
1	7/6/87	7	1		67.1	N	
1	7/6/87	8	1		67.1	N	
1	7/6/87	9	1		67.1	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-105							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	7/6/87	10	1		66.8	N	
1	7/6/87	11	1		66.7	N	
1	7/6/87	12	1		66.6	N	
1	8/4/87	1	1		67	Y	
1	8/4/87	2	1		67	N	
1	8/4/87	3	1		67	N	
1	8/4/87	4	1		67	N	
1	8/4/87	5	1		66	N	
1	8/4/87	6	1		67	N	
1	8/4/87	7	1		67	N	
1	8/4/87	8	1		67	N	
1	8/4/87	9	1		67	N	
1	8/4/87	10	1		67	N	
1	8/4/87	11	1		67	N	
1	8/4/87	12	1		67	N	
1	9/7/87	1	1		61.3	N	
1	9/7/87	2	1		62.8	N	
1	9/7/87	3	1		62.8	N	
1	9/7/87	4	1		63.1	N	
1	9/7/87	5	1		61.3	N	
1	9/7/87	6	1		63.5	N	
1	9/7/87	7	1		63.4	N	
1	9/7/87	8	1		63.4	N	
1	9/7/87	9	1		63.3	N	
1	9/7/87	10	1		63.3	N	
1	9/7/87	11	1		63.4	N	
1	9/7/87	12	1		63.7	N	
1	9/7/87	13	1		63.7	N	
1	9/7/87	14	1		63.7	N	
1	10/5/87	1	1		71.1	N	
1	10/5/87	2	1		71.8	Y	
1	10/5/87	3	1		71.7	N	
1	10/5/87	4	1		71.5	N	
1	10/5/87	5	1		66.5	N	
1	10/5/87	6	1		70.9	N	
1	10/5/87	7	1		70.7	N	
1	10/5/87	8	1		70.6	N	
1	10/5/87	9	1		70.6	N	
1	10/5/87	10	1		70.7	N	
1	10/5/87	11	1		71	N	
1	10/5/87	12	1		71	N	
1	11/3/87	1	1		88	N	
1	11/3/87	2	1		88	N	
1	11/3/87	3	1		88	N	
1	11/3/87	4	1		88	N	
1	11/3/87	5	1		96	Y	
1	11/3/87	6	1		88	N	
1	11/3/87	7	1		86	N	
1	11/3/87	8	1		86	N	
1	11/3/87	9	1		86	N	
1	11/3/87	10	1		86	N	
1	11/3/87	11	1		86	N	
1	11/3/87	12	1		86	N	
1	12/8/87	1	1		70	N	
1	12/8/87	2	1		70	N	
1	12/8/87	3	1		70	N	
1	12/8/87	4	1		70	N	
1	12/8/87	5	1		72	Y	
1	12/8/87	6	1		69	N	
1	12/8/87	7	1		70	N	
1	12/8/87	8	1		70	N	
1	12/8/87	9	1		69	N	
1	12/8/87	10	1		69	N	
1	12/8/87	11	1		69	N	
1	12/8/87	12	1		69	N	
1	2/1/88	1	1		66	Y	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-105							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	2/1/88	3	1		65	N	
1	2/1/88	4	1		65	N	
1	2/1/88	5	1		65	N	
1	2/1/88	6	1		65	N	
1	2/1/88	7	1		65	N	
1	2/1/88	8	1		49	N	
1	2/1/88	9	1		64	N	
1	2/1/88	10	1		52	N	
1	3/7/88	1	1		67	Y	
1	3/7/88	2	1		66	N	
1	3/7/88	3	1		66	N	
1	3/7/88	4	1		65	N	
1	3/7/88	5	1		66	N	
1	3/7/88	6	1		65	N	
1	3/7/88	7	1		65	N	
1	3/7/88	8	1		65	N	
1	3/7/88	9	1		65	N	
1	3/7/88	10	1		65	N	
1	3/7/88	11	1		65	N	
1	3/7/88	12	1		64	N	
1	4/6/88	1	1		63	Y	
1	4/6/88	2	1		62	N	
1	4/6/88	3	1		62	N	
1	4/6/88	4	1		62	N	
1	4/6/88	5	1		63	N	
1	4/6/88	6	1		63	N	
1	4/6/88	7	1		62	N	
1	4/6/88	8	1		62	N	
1	4/6/88	9	1		62	N	
1	4/6/88	10	1		62	N	
1	4/6/88	11	1		62	N	
1	4/6/88	12	1		62	N	
1	5/3/88	1	1		64	N	
1	5/3/88	2	1		65	N	
1	5/3/88	3	1		64	N	
1	5/3/88	4	1		66	N	
1	5/3/88	5	1		77	Y	
1	5/3/88	6	1		65	N	
1	5/3/88	7	1		64	N	
1	5/3/88	8	1		66	N	
1	5/3/88	10	1		66	N	
1	5/3/88	11	1		66	N	
1	5/3/88	12	1		64	N	
1	6/7/88	1	1		67	N	
1	6/7/88	2	1		67	N	
1	6/7/88	3	1		67	N	
1	6/7/88	4	1		66	N	
1	6/7/88	5	1		76	Y	
1	6/7/88	6	1		67	N	
1	6/7/88	7	1		66	N	
1	6/7/88	8	1		66	N	
1	6/7/88	9	1		66	N	
1	6/7/88	10	1		66	N	
1	6/7/88	11	1		66	N	
1	6/7/88	12	1		65	N	
1	7/4/88	1	1		66	N	
1	7/4/88	2	1		66	N	
1	7/4/88	3	1		66	N	
1	7/4/88	4	1		66	N	
1	7/4/88	5	1		70	Y	
1	7/4/88	6	1		66	N	
1	7/4/88	7	1		66	N	
1	7/4/88	8	1		66	N	
1	7/4/88	9	1		65	N	
1	7/4/88	10	1		66	N	
1	7/4/88	11	1		65	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-105 THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	7/4/88	12	1		65	N	
1	8/1/88	1	1		53	N	
1	8/1/88	2	1		54	Y	
1	8/1/88	3	1		54	N	
1	8/1/88	4	1		54	N	
1	8/1/88	5	1		54	N	
1	8/1/88	6	1		54	N	
1	8/1/88	7	1		54	N	
1	8/1/88	8	1		54	N	
1	8/1/88	9	1		53	N	
1	8/1/88	10	1		53	N	
1	8/1/88	11	1		53	N	
1	8/1/88	12	1		53	N	
1	9/5/88	1	1		64	N	
1	9/5/88	2	1		66	N	
1	9/5/88	3	1		67	N	
1	9/5/88	4	1		66	N	
1	9/5/88	5	1		68	Y	
1	9/5/88	6	1		68	N	
1	9/5/88	7	1		68	N	
1	9/5/88	8	1		68	N	
1	9/5/88	9	1		68	N	
1	9/5/88	10	1		68	N	
1	9/5/88	11	1		68	N	
1	9/5/88	12	1		67	N	
1	10/3/88	1	1		70	N	
1	10/3/88	2	1		71	Y	
1	10/3/88	3	1		70	N	
1	10/3/88	4	1		70	N	
1	10/3/88	5	1		70	N	
1	10/3/88	6	1		70	N	
1	10/3/88	7	1		70	N	
1	10/3/88	8	1		70	N	
1	10/3/88	9	1		70	N	
1	10/3/88	10	1		70	N	
1	10/3/88	11	1		70	N	
1	10/3/88	12	1		70	N	
1	2/6/89	1	1		74	Y	
1	2/6/89	2	1		73	N	
1	2/6/89	3	1		73	N	
1	2/6/89	4	1		73	N	
1	2/6/89	5	1		69	N	
1	2/6/89	6	1		72	N	
1	2/6/89	7	1		72	N	
1	2/6/89	8	1		72	N	
1	2/6/89	9	1		72	N	
1	2/6/89	10	1		70	N	
1	2/6/89	11	1		71	N	
1	2/6/89	12	1		72	N	
1	3/6/89	1	1		68	N	
1	3/6/89	2	1		66	N	
1	3/6/89	3	1		65	N	
1	3/6/89	4	1		65	N	
1	3/6/89	5	1		74	Y	
1	3/6/89	6	1		65	N	
1	3/6/89	7	1		65	N	
1	3/6/89	8	1		65	N	
1	3/6/89	9	1		65	N	
1	3/6/89	10	1		65	N	
1	3/6/89	11	1		65	N	
1	3/6/89	12	1		65	N	
1	4/5/89	1	1		66	N	
1	4/5/89	2	1		65	N	
1	4/5/89	3	1		64	N	
1	4/5/89	4	1		64	N	
1	4/5/89	5	1		67	Y	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-105							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	4/5/89	6	1		65	N	
1	4/5/89	7	1		66	N	
1	4/5/89	8	1		64	N	
1	4/5/89	9	1		65	N	
1	4/5/89	10	1		65	N	
1	4/5/89	11	1		65	N	
1	4/5/89	12	1		64	N	
1	4/9/89	1	1		66	N	
1	4/9/89	2	1		65	N	
1	4/9/89	3	1		64	N	
1	4/9/89	4	1		64	N	
1	4/9/89	5	1		67	Y	
1	4/9/89	6	1		65	N	
1	4/9/89	7	1		66	N	
1	4/9/89	8	1		64	N	
1	4/9/89	9	1		65	N	
1	4/9/89	10	1		65	N	
1	4/9/89	11	1		65	N	
1	4/9/89	12	1		64	N	
1	11/12/91	1	1		67	N	J-TI-023
1	11/12/91	2	1		67	N	
1	11/12/91	3	1		67	N	
1	11/12/91	4	1		68	Y	
1	11/12/91	5	1		68	N	
1	11/12/91	6	1		68	N	
1	11/12/91	7	1		68	N	
1	11/12/91	8	1		68	N	
1	11/12/91	9	1		68	N	
1	11/12/91	10	1		68	N	
1	11/12/91	11	1		68	N	
1	11/12/91	12	1		68	N	
1	1/2/92	1	1		70.2	N	J-910126143-29 TC #9-12 BAD DATA
1	1/2/92	2	1		70.4	N	
1	1/2/92	3	1		70.3	N	
1	1/2/92	4	1		70.1	N	
1	1/2/92	5	1		70.4	N	
1	1/2/92	6	1		70.7	N	
1	1/2/92	7	1		70.8	N	
1	1/2/92	8	1		71	Y	
1	7/2/92	1	1			N	O/S
1	11/4/92	1	1			N	#S&DA-92-488 NO RDGS SINCE JANUARY 1992
1	11/6/92	1	1		69.3	N	J 817-13-55-001
1	11/6/92	2	1		69.5	N	
1	11/6/92	3	1		69.8	N	
1	11/6/92	4	1		70.1	N	
1	11/6/92	5	1		69.9	N	
1	11/6/92	6	1		69.9	N	
1	11/6/92	7	1		69.9	N	
1	11/6/92	8	1		70	N	
1	11/6/92	9	1		70	N	
1	11/6/92	10	1		70.3	Y	
1	11/6/92	11	1		70.1	N	
1	11/6/92	12	1		70.1	N	
1	11/15/92	1	1		66.9	N	J 890423320-42
1	11/15/92	2	1		67.1	N	
1	11/15/92	3	1		67.2	N	
1	11/15/92	4	1			N	
1	11/15/92	5	1		67.4	Y	
1	11/15/92	6	1		67.4	N	
1	11/15/92	7	1		67.4	N	
1	11/15/92	8	1		67.4	N	
1	11/15/92	9	1		67.4	N	
1	11/15/92	10	1		67.4	N	
1	11/15/92	11	1		67.4	N	
1	11/15/92	12	1		67.2	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-105							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	12/12/92	1	1		68.3	Y	J 910126143-40
1	12/12/92	2	1		67.8	N	
1	12/12/92	3	1		68	N	
1	12/12/92	4	1		67.9	N	
1	12/12/92	5	1		68	N	
1	12/12/92	6	1		68	N	
1	12/12/92	7	1		68	N	
1	12/12/92	8	1		68	N	
1	12/12/92	9	1		68	N	
1	12/12/92	10	1		68	N	
1	12/12/92	11	1		67.9	N	
1	12/12/92	12	1		66.9	N	
1	1/1/93	1	1		66.3	Y	J 890523512-47
1	1/1/93	2	1		65.4	N	
1	1/1/93	3	1		65.4	N	
1	1/1/93	4	1		65.5	N	
1	1/1/93	5	1		65.4	N	
1	1/1/93	6	1		65.4	N	
1	1/1/93	7	1		65.4	N	
1	1/1/93	8	1		65.4	N	
1	1/1/93	9	1		65.3	N	
1	1/1/93	10	1		65.3	N	
1	1/1/93	11	1		65.2	N	
1	1/1/93	12	1		64.2	N	
1	2/18/93	1	1		64.6	Y	J TI-040
1	2/18/93	2	1		63.1	N	
1	2/18/93	3	1		63	N	
1	2/18/93	5	1		63.1	N	
1	2/18/93	6	1		63	N	
1	2/18/93	7	1		63	N	
1	2/18/93	8	1		63	N	
1	2/18/93	9	1		62.9	N	
1	2/18/93	12	1		61.2	N	
1	7/24/93	1	1		62.6	N	J 910126143-42
1	7/24/93	2	1		62.9	N	
1	7/24/93	3	1		63.1	N	
1	7/24/93	4	1		63	N	
1	7/24/93	5	1		63.2	N	
1	7/24/93	6	1		63.2	N	
1	7/24/93	7	1		63.3	Y	
1	7/24/93	8	1		63.3	N	
1	7/24/93	9	1		63.2	N	
1	7/24/93	10	1		63.2	N	
1	7/24/93	11	1		63.1	N	
1	7/24/93	12	1		63	N	
1	7/31/93	1	1		62.6	N	J TI-039 910126143-50
1	7/31/93	2	1		62.9	N	
1	7/31/93	3	1		63	N	
1	7/31/93	4	1		63.1	N	
1	7/31/93	5	1		63.1	N	
1	7/31/93	6	1		63.2	N	
1	7/31/93	7	1		63.2	N	
1	7/31/93	8	1		63.3	Y	
1	7/31/93	9	1		63.2	N	
1	7/31/93	10	1		63	N	
1	7/31/93	11	1		63.2	N	
1	7/31/93	12	1		63.1	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	9/3/74	1	1	46	114.8	Y	degree C/TWINS conform
1	9/3/74	2	1	46	114.8	N	degree C/TWINS conform
1	9/3/74	3	1	46	114.8	N	degree C/TWINS conform
1	9/3/74	4	1	44	111.2	N	degree C/TWINS conform
1	9/3/74	5	1	42	107.6	N	degree C/TWINS conform
1	9/3/74	6	1	42	107.6	N	degree C/TWINS conform
1	9/3/74	7	1	42	107.6	N	degree C/TWINS conform
1	9/3/74	8	1	42	107.6	N	degree C/TWINS conform
1	9/3/74	9	1	42	107.6	N	degree C/TWINS conform
1	9/3/74	10	1	42	107.6	N	degree C/TWINS conform
1	9/3/74	11	1	42	107.6	N	degree C/TWINS conform
1	9/18/74	1	1	21.65	70.97	N	degree C/TWINS conform
1	9/18/74	2	1	23.3	73.94	Y	degree C/TWINS conform
1	9/18/74	3	1	23.3	73.94	N	degree C/TWINS conform
1	9/18/74	4	1	23.3	73.94	N	degree C/TWINS conform
1	9/18/74	5	1	23.3	73.94	N	degree C/TWINS conform
1	9/18/74	6	1	23.3	73.94	N	degree C/TWINS conform
1	9/18/74	7	1	23.3	73.94	N	degree C/TWINS conform
1	9/18/74	8	1	23.3	73.94	N	degree C/TWINS conform
1	9/18/74	9	1	23.3	73.94	N	degree C/TWINS conform
1	9/18/74	10	1	23.3	73.94	N	degree C/TWINS conform
1	9/18/74	11	1	23.3	73.94	N	degree C/TWINS conform
1	12/11/74	1	1	27.22	80.996	N	degree C/TWINS conform
1	12/11/74	2	1	27.22	80.996	N	degree C/TWINS conform
1	12/11/74	3	1	27.22	80.996	N	degree C/TWINS conform
1	12/11/74	4	1	27.22	80.996	N	degree C/TWINS conform
1	12/11/74	5	1	27.22	80.996	N	degree C/TWINS conform
1	12/11/74	6	1	29.44	84.992	Y	degree C/TWINS conform
1	12/11/74	7	1	29.44	84.992	N	degree C/TWINS conform
1	12/11/74	8	1	29.44	84.992	N	degree C/TWINS conform
1	12/11/74	9	1	29.44	84.992	N	degree C/TWINS conform
1	12/11/74	10	1	29.44	84.992	N	degree C/TWINS conform
1	12/11/74	11	1	29.44	84.992	N	degree C/TWINS conform
1	1/10/75	1	1		77	Y	
1	1/10/75	2	1		77	N	
1	1/10/75	3	1		77	N	
1	1/10/75	4	1		71	N	
1	1/10/75	5	1		68	N	
1	1/10/75	6	1		68	N	
1	1/10/75	7	1		68	N	
1	1/10/75	8	1		68	N	
1	1/10/75	9	1		68	N	
1	1/10/75	10	1		68	N	
1	1/10/75	11	1		68	N	
1	1/10/75	12	1		67	N	
1	1/10/75	13	1		64	N	
1	1/10/75	14	1		58	N	
1	4/5/75	1	1		78	Y	
1	4/5/75	2	1		77	N	
1	4/5/75	3	1		75	N	
1	4/5/75	4	1		74	N	
1	4/5/75	5	1		71	N	
1	4/5/75	6	1		69	N	
1	4/5/75	7	1		69	N	
1	4/5/75	8	1		69	N	
1	4/5/75	9	1		68	N	
1	4/5/75	10	1		68	N	
1	4/5/75	11	1		68	N	
1	4/5/75	12	1		65	N	
1	4/10/75	1	1	28	82.4	N	degree C/TWINS conform
1	4/10/75	2	1	28	82.4	N	degree C/TWINS conform
1	4/10/75	3	1	28	82.4	N	degree C/TWINS conform
1	4/10/75	4	1	28	82.4	N	degree C/TWINS conform
1	4/10/75	5	1	28	82.4	N	degree C/TWINS conform
1	4/10/75	6	1	29	84.2	Y	degree C/TWINS conform
1	4/10/75	7	1	28	82.4	N	degree C/TWINS conform

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	4/10/75	8	1	25	77	N	degree C/TWINS conform
1	4/10/75	9	1	25	77	N	degree C/TWINS conform
1	4/10/75	10	1	26	78.8	N	degree C/TWINS conform
1	4/10/75	11	1	25	77	N	degree C/TWINS conform
1	4/10/75	12	1	24	75.2	N	degree C/TWINS conform
1	7/15/75	1	1		89	Y	
1	7/15/75	2	1		89	N	
1	7/15/75	3	1		89	N	
1	7/15/75	4	1		86	N	
1	7/15/75	5	1		85	N	
1	7/15/75	6	1		85	N	
1	7/15/75	7	1		85	N	
1	7/15/75	8	1		85	N	
1	7/15/75	9	1		85	N	
1	7/15/75	10	1		85	N	
1	7/15/75	11	1		85	N	
1	7/15/75	12	1		84	N	
1	7/20/76	1	1		75	Y	
1	7/20/76	2	1		74	N	
1	7/20/76	3	1		74	N	
1	7/20/76	4	1		74	N	
1	7/20/76	5	1		74	N	
1	7/20/76	6	1		71	N	
1	7/20/76	7	1		71	N	
1	7/20/76	8	1		71	N	
1	7/20/76	9	1		71	N	
1	7/20/76	10	1		71	N	
1	7/20/76	11	1		71	N	
1	7/20/76	12	1		71	N	
1	1/11/77	1	1		104	Y	
1	1/11/77	2	1		99	N	
1	1/11/77	3	1		97	N	
1	1/11/77	4	1		98	N	
1	1/11/77	5	1		98	N	
1	1/11/77	6	1		98	N	
1	1/11/77	7	1		98	N	
1	1/11/77	8	1		98	N	
1	1/11/77	9	1		98	N	
1	1/11/77	10	1		98	N	
1	1/11/77	11	1		98	N	
1	1/11/77	12	1		96	N	
1	5/17/77	1	1		78	Y	
1	5/17/77	2	1		76	N	
1	5/17/77	3	1		75	N	
1	5/17/77	4	1		72	N	
1	5/17/77	5	1		70	N	
1	5/17/77	6	1		71	N	
1	5/17/77	7	1		70	N	
1	5/17/77	8	1		70	N	
1	5/17/77	9	1		70	N	
1	5/17/77	10	1		70	N	
1	5/17/77	11	1		70	N	
1	5/17/77	12	1		68	N	
1	7/26/77	2	1		67	N	
1	7/26/77	3	1		66	N	
1	7/26/77	4	1		66	N	
1	7/26/77	5	1		66	N	
1	7/26/77	6	1		66	N	
1	7/26/77	7	1		66	N	
1	7/26/77	8	1		66	N	
1	7/26/77	9	1		66	N	
1	7/26/77	10	1		66	N	
1	7/26/77	11	1		66	N	
1	7/26/77	12	1		65	N	
1	1/16/78	1	1		73	Y	
1	1/16/78	2	1		71	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	1/16/78	3	1		71	N	
1	1/16/78	4	1		72	N	
1	1/16/78	5	1		72	N	
1	1/16/78	6	1		72	N	
1	1/16/78	7	1		72	N	
1	1/16/78	8	1		73	N	
1	1/16/78	9	1		72	N	
1	1/16/78	10	1		72	N	
1	1/16/78	11	1		72	N	
1	1/16/78	12	1		70	N	
1	4/24/78	1	1		81	N	
1	4/24/78	2	1		82	Y	
1	4/24/78	3	1		80	N	
1	4/24/78	4	1		80	N	
1	4/24/78	5	1		78	N	
1	4/24/78	6	1		78	N	
1	4/24/78	7	1		76	N	
1	4/24/78	8	1		76	N	
1	4/24/78	9	1		75	N	
1	4/24/78	10	1		75	N	
1	4/24/78	11	1		75	N	
1	4/24/78	12	1		75	N	
1	7/16/78	1	1		70	Y	
1	7/16/78	2	1		64	N	
1	7/16/78	3	1		64	N	
1	7/16/78	4	1		64	N	
1	7/16/78	5	1		64	N	
1	7/16/78	6	1		64	N	
1	7/16/78	7	1		64	N	
1	7/16/78	8	1		64	N	
1	7/16/78	9	1		64	N	
1	7/16/78	10	1		64	N	
1	7/16/78	11	1		64	N	
1	7/16/78	12	1		64	N	
1	1/5/79	1	1		74	Y	
1	1/5/79	2	1		71	N	
1	1/5/79	3	1		73	N	
1	1/5/79	4	1		71	N	
1	1/5/79	5	1		71	N	
1	1/5/79	6	1		71	N	
1	1/5/79	7	1		71	N	
1	1/5/79	8	1		72	N	
1	1/5/79	9	1		72	N	
1	1/5/79	10	1		71	N	
1	1/5/79	11	1		71	N	
1	1/5/79	12	1		71	N	
1	4/7/79	1	1		70	Y	
1	4/7/79	2	1		67	N	
1	4/7/79	3	1		66	N	
1	4/7/79	4	1		66	N	
1	4/7/79	5	1		66	N	
1	4/7/79	6	1		66	N	
1	4/7/79	7	1		66	N	
1	4/7/79	8	1		66	N	
1	4/7/79	9	1		65	N	
1	4/7/79	10	1		65	N	
1	4/7/79	11	1		65	N	
1	4/7/79	12	1		63	N	
1	7/1/79	1	1		69	Y	
1	7/1/79	2	1		69	N	
1	7/1/79	3	1		69	N	
1	7/1/79	4	1		69	N	
1	7/1/79	5	1		69	N	
1	7/1/79	6	1		69	N	
1	7/1/79	7	1		69	N	
1	7/1/79	8	1		69	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	7/1/79	9	1		69	N	
1	7/1/79	10	1		69	N	
1	7/1/79	11	1		69	N	
1	7/1/79	12	1		69	N	
1	10/8/79	1	1		69	N	
1	10/8/79	2	1		69	N	
1	10/8/79	3	1		69	N	
1	10/8/79	4	1		69	N	
1	10/8/79	5	1		69	N	
1	10/8/79	6	1		69	N	
1	10/8/79	7	1		69	N	
1	10/8/79	8	1		69	N	
1	10/8/79	9	1		69	N	
1	10/8/79	10	1		69	N	
1	10/8/79	11	1		70	Y	
1	10/8/79	12	1		70	N	
1	1/9/80	1	1		86	Y	
1	1/9/80	2	1		86	N	
1	1/9/80	3	1		84	N	
1	1/9/80	4	1		84	N	
1	1/9/80	5	1		84	N	
1	1/9/80	6	1		84	N	
1	1/9/80	7	1		84	N	
1	1/9/80	8	1		84	N	
1	1/9/80	9	1		84	N	
1	1/9/80	10	1		85	N	
1	1/9/80	11	1		84	N	
1	1/9/80	12	1		83	N	
1	4/4/80	1	1		57	Y	
1	4/4/80	2	1		56	N	
1	4/4/80	3	1		54	N	
1	4/4/80	4	1		54	N	
1	4/4/80	5	1		54	N	
1	4/4/80	6	1		54	N	
1	4/4/80	7	1		54	N	
1	4/4/80	8	1		54	N	
1	4/4/80	9	1		54	N	
1	4/4/80	10	1		54	N	
1	4/4/80	11	1		54	N	
1	4/4/80	12	1		53	N	
1	7/5/80	1	1		63	Y	
1	7/5/80	2	1		63	N	
1	7/5/80	3	1		63	N	
1	7/5/80	4	1		63	N	
1	7/5/80	5	1		63	N	
1	7/5/80	6	1		63	N	
1	7/5/80	7	1		63	N	
1	7/5/80	8	1		63	N	
1	7/5/80	9	1		63	N	
1	7/5/80	10	1		63	N	
1	7/5/80	11	1		63	N	
1	7/5/80	12	1		63	N	
1	12/26/80	1	1		75	Y	
1	12/26/80	2	1		75	N	
1	12/26/80	3	1		75	N	
1	12/26/80	4	1		75	N	
1	12/26/80	5	1		74	N	
1	12/26/80	6	1		74	N	
1	12/26/80	7	1		75	N	
1	12/26/80	8	1		75	N	
1	12/26/80	9	1		75	N	
1	12/26/80	10	1		75	N	
1	12/26/80	11	1		75	N	
1	12/26/80	12	1		75	N	
1	1/19/82	1	1		75	Y	
1	1/19/82	2	1		74	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	1/19/82	3	1		73	N	
1	1/19/82	4	1		73	N	
1	1/19/82	5	1		73	N	
1	1/19/82	6	1		73	N	
1	1/19/82	7	1		73	N	
1	1/19/82	8	1		73	N	
1	1/19/82	9	1		73	N	
1	1/19/82	10	1		73	N	
1	1/19/82	11	1		73	N	
1	1/19/82	12	1		71	N	
1	4/6/82	1	1		63	Y	
1	4/6/82	2	1		61	N	
1	4/6/82	3	1		61	N	
1	4/6/82	4	1		61	N	
1	4/6/82	5	1		61	N	
1	4/6/82	6	1		61	N	
1	4/6/82	7	1		61	N	
1	4/6/82	8	1		61	N	
1	4/6/82	9	1		61	N	
1	4/6/82	10	1		61	N	
1	4/6/82	11	1		61	N	
1	4/6/82	12	1		60	N	
1	7/13/82	1	1			N	O/S
1	1/8/83	1	1			N	O/S
1	4/3/83	1	1			N	O/S
1	10/13/83	1	1			N	O/S
1	10/23/89	1	1		71.5	Y	
1	10/23/89	2	1		71.6	N	
1	10/23/89	3	1		71.6	N	
1	10/23/89	4	1		71.7	N	
1	10/23/89	5	1		71.6	N	
1	10/23/89	6	1		71.5	N	
1	10/23/89	7	1		71.4	N	
1	10/23/89	8	1		71.4	N	
1	10/23/89	9	1		71.5	N	
1	10/23/89	10	1		71.6	N	
1	10/23/89	11	1		71.7	N	
1	10/23/89	12	1		71.9	Y	
1	11/4/89	1	1		66.4	N	
1	11/4/89	2	1		66.4	N	
1	11/4/89	3	1		66.4	N	
1	11/4/89	4	1		66.5	N	
1	11/4/89	5	1		66.5	N	
1	11/4/89	6	1		66.5	N	
1	11/4/89	7	1		66.5	N	
1	11/4/89	8	1		66.5	N	
1	11/4/89	9	1		66.5	N	
1	11/4/89	10	1		66.6	Y	
1	11/4/89	11	1		66.6	N	
1	11/4/89	12	1		66.6	N	
1	11/10/89	1	1		69.5	Y	
1	11/10/89	2	1		69.5	N	
1	11/10/89	3	1		69.4	N	
1	11/10/89	4	1		69.4	N	
1	11/10/89	5	1		69.4	N	
1	11/10/89	6	1		69.4	N	
1	11/10/89	7	1		69.4	N	
1	11/10/89	8	1		69.4	N	
1	11/10/89	9	1		69.4	N	
1	11/10/89	10	1		69.4	N	
1	11/10/89	11	1		69.4	N	
1	11/10/89	12	1		69.4	N	
1	11/18/89	1	1		71.3	Y	J
1	11/18/89	2	1		71	N	
1	11/18/89	3	1		71	N	
1	11/18/89	4	1		71	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	11/18/89	5	1		71	N	
1	11/18/89	6	1		71	N	
1	11/18/89	7	1		71	N	
1	11/18/89	8	1		71	N	
1	11/18/89	9	1		71	N	
1	11/18/89	10	1		71	N	
1	11/18/89	11	1		71	N	
1	11/18/89	12	1		70.8	N	
1	11/24/89	1	1		71.2	Y	
1	11/24/89	2	1		70.8	N	
1	11/24/89	3	1		70.8	N	
1	11/24/89	4	1		70.8	N	
1	11/24/89	5	1		70.7	N	
1	11/24/89	6	1		70.7	N	
1	11/24/89	7	1		70.7	N	
1	11/24/89	8	1		70.7	N	
1	11/24/89	9	1		70.7	N	
1	11/24/89	10	1		70.7	N	
1	11/24/89	11	1		70.7	N	
1	11/24/89	12	1		70.5	N	
1	12/1/89	1	1		71.6	Y	
1	12/1/89	2	1		71.2	N	
1	12/1/89	3	1		71.1	N	
1	12/1/89	4	1		71.1	N	
1	12/1/89	5	1		71.1	N	
1	12/1/89	6	1		71.1	N	
1	12/1/89	7	1		71.1	N	
1	12/1/89	8	1		71.1	N	
1	12/1/89	9	1		71.1	N	
1	12/1/89	10	1		71.1	N	
1	12/1/89	11	1		71.2	N	
1	12/1/89	12	1		70.5	N	
1	12/10/89	1	1		71.2	Y	J
1	12/10/89	2	1		70.8	N	
1	12/10/89	3	1		70.8	N	
1	12/10/89	4	1		70.7	N	
1	12/10/89	5	1		70.5	N	
1	12/10/89	6	1		70.5	N	
1	12/10/89	7	1		70.6	N	
1	12/10/89	8	1		70.7	N	
1	12/10/89	9	1		70.7	N	
1	12/10/89	10	1		70.5	N	
1	12/10/89	11	1		70.5	N	
1	12/10/89	12	1		69.8	N	
1	12/15/89	1	1		71.2	Y	
1	12/15/89	3	1		70.2	N	
1	12/15/89	4	1		70.2	N	
1	12/15/89	5	1		70	N	
1	12/15/89	6	1		70	N	
1	12/15/89	7	1		70	N	
1	12/15/89	8	1		70	N	
1	12/15/89	9	1		70.1	N	
1	12/15/89	10	1		70.3	N	
1	12/15/89	11	1		70.3	N	
1	12/15/89	12	1		69.6	N	
1	12/23/89	1	1		71	Y	
1	12/23/89	3	1		70	N	
1	12/23/89	4	1		70	N	
1	12/23/89	5	1		70	N	
1	12/23/89	6	1		70	N	
1	12/23/89	7	1		70	N	
1	12/23/89	8	1		70	N	
1	12/23/89	9	1		70	N	
1	12/23/89	10	1		70	N	
1	12/23/89	11	1		70	N	
1	12/23/89	12	1		69	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	12/30/89	1	1		68.9	Y	J-89023512-20
1	12/30/89	3	1		68	N	
1	12/30/89	4	1		68	N	
1	12/30/89	5	1		67.9	N	
1	12/30/89	6	1		67.9	N	
1	12/30/89	7	1		67.7	N	
1	12/30/89	8	1		67.8	N	
1	12/30/89	9	1		67.8	N	
1	12/30/89	10	1		67.8	N	
1	12/30/89	11	1		67.7	N	
1	12/30/89	12	1		67.6	N	
1	1/5/90	1	1		68	Y	J
1	1/5/90	3	1		66.8	N	
1	1/5/90	4	1		66.7	N	
1	1/5/90	5	1		66.6	N	
1	1/5/90	6	1		66.6	N	
1	1/5/90	7	1		66.5	N	
1	1/5/90	8	1		66.5	N	
1	1/5/90	9	1		66.4	N	
1	1/5/90	10	1		66.4	N	
1	1/5/90	11	1		66.3	N	
1	1/5/90	12	1		65.1	N	
1	1/13/90	1	1		67.2	Y	J890523512-20
1	1/13/90	3	1		66.1	N	
1	1/13/90	4	1		66.1	N	
1	1/13/90	5	1		66	N	
1	1/13/90	6	1		66	N	
1	1/13/90	7	1		66	N	
1	1/13/90	8	1		66	N	
1	1/13/90	9	1		66	N	
1	1/13/90	10	1		66	N	
1	1/13/90	11	1		65.9	N	
1	1/13/90	12	1		64.9	N	
1	1/19/90	1	1		64.4	N	
1	1/19/90	3	1		65.9	Y	
1	1/19/90	4	1		65.5	N	
1	1/19/90	5	1		65.4	N	
1	1/19/90	6	1		65.4	N	
1	1/19/90	7	1		65.4	N	
1	1/19/90	8	1		65.4	N	
1	1/19/90	9	1		65.4	N	
1	1/19/90	10	1		65.4	N	
1	1/19/90	11	1		65.2	N	
1	1/19/90	12	1		64	N	
1	1/26/90	1	1		66.4	Y	J
1	1/26/90	3	1		65.3	N	
1	1/26/90	4	1		65.2	N	
1	1/26/90	5	1		65.1	N	
1	1/26/90	6	1		65	N	
1	1/26/90	7	1		65	N	
1	1/26/90	8	1		64.9	N	
1	1/26/90	9	1		64.9	N	
1	1/26/90	10	1		64.8	N	
1	1/26/90	11	1		64.6	N	
1	1/26/90	12	1		63.5	N	
1	2/2/90	1	1		67.8	Y	J
1	2/2/90	3	1		66.8	N	
1	2/2/90	4	1		66.6	N	
1	2/2/90	5	1		66.7	N	
1	2/2/90	6	1		66.6	N	
1	2/2/90	7	1		66.6	N	
1	2/2/90	8	1		66.5	N	
1	2/2/90	9	1		66.5	N	
1	2/2/90	10	1		66.5	N	
1	2/2/90	11	1		66.3	N	
1	2/2/90	12	1		65.2	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	2/5/90	1	1		66.4	Y	J-2E-OP-021
1	2/5/90	3	1		65.1	N	
1	2/5/90	4	1		65.1	N	
1	2/5/90	5	1		65	N	
1	2/5/90	6	1		65	N	
1	2/5/90	7	1		65	N	
1	2/5/90	8	1		65	N	
1	2/5/90	9	1		65	N	
1	2/5/90	10	1		65	N	
1	2/5/90	11	1		64.8	N	
1	2/5/90	12	1		63.7	N	
1	2/11/90	1	1		66	Y	J-2E-OP-021
1	2/11/90	3	1		64.6	N	
1	2/11/90	4	1		64.8	N	
1	2/11/90	5	1		64.9	N	
1	2/11/90	6	1		65.1	N	
1	2/11/90	7	1		64.8	N	
1	2/11/90	8	1		64.7	N	
1	2/11/90	9	1		64.7	N	
1	2/11/90	10	1		64.6	N	
1	2/11/90	11	1		64.2	N	
1	2/11/90	12	1		62.9	N	
1	3/2/90	1	1		65.4	N	J-2E-OP-020
1	3/2/90	3	1		64	N	
1	3/2/90	4	1		65.1	N	
1	3/2/90	5	1		65.3	N	
1	3/2/90	6	1		65.6	N	
1	3/2/90	7	1		65.8	N	
1	3/2/90	8	1		66	Y	
1	3/2/90	9	1		65.9	N	
1	3/2/90	10	1		65.3	N	
1	3/2/90	11	1		63.8	N	
1	3/2/90	12	1			N	
1	4/7/90	1	1		65	Y	J-2E-OP-020
1	4/7/90	2	1		64	N	
1	4/7/90	3	1		64	N	
1	4/7/90	4	1		64	N	
1	4/7/90	5	1		64	N	
1	4/7/90	6	1		64	N	
1	4/7/90	7	1		64	N	
1	4/7/90	8	1		64	N	
1	4/7/90	9	1		64	N	
1	4/7/90	10	1		64	N	
1	4/7/90	11	1		63	N	
1	4/7/90	12	1		63	N	
1	5/5/90	1	1		64	Y	
1	5/5/90	3	1		63	N	
1	5/5/90	4	1		63	N	
1	5/5/90	5	1		63	N	
1	5/5/90	6	1		63	N	
1	5/5/90	7	1		63	N	
1	5/5/90	8	1		63	N	
1	5/5/90	9	1		63	N	
1	5/5/90	10	1		63	N	
1	5/5/90	11	1		63	N	
1	5/5/90	12	1		62	N	
1	6/1/90	1	1		68.1	Y	
1	6/1/90	3	1		64.9	N	
1	6/1/90	4	1		65	N	
1	6/1/90	5	1		65.2	N	
1	6/1/90	6	1		65.9	N	
1	6/1/90	7	1		65.6	N	
1	6/1/90	8	1		65.7	N	
1	6/1/90	9	1		65.7	N	
1	6/1/90	10	1		65.8	N	
1	6/1/90	11	1		65.6	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	6/1/90	12	1		65.1	N	
1	7/8/90	1	1		66.3	Y	J-2E-OP-020
1	7/8/90	3	1		65.7	N	
1	7/8/90	4	1		65.7	N	
1	7/8/90	5	1		65.6	N	
1	7/8/90	6	1		65.5	N	
1	7/8/90	7	1		65.6	N	
1	7/8/90	8	1		65.8	N	
1	7/8/90	9	1		66	N	
1	7/8/90	10	1		66.1	N	
1	7/8/90	11	1		66.2	N	
1	7/8/90	12	1		66.2	N	
1	8/3/90	1	1		63.2	N	J
1	8/3/90	3	1		63.1	N	
1	8/3/90	4	1		63.5	N	
1	8/3/90	5	1		63.8	N	
1	8/3/90	6	1		64.1	N	
1	8/3/90	7	1		64.2	N	
1	8/3/90	8	1		64.4	N	
1	8/3/90	9	1		64.8	N	
1	8/3/90	10	1		64.9	N	
1	8/3/90	11	1		65	N	
1	8/3/90	12	1		65.2	Y	
1	9/10/90	1	1		69.8	N	J
1	9/10/90	3	1		70.2	N	
1	9/10/90	4	1		70.2	N	
1	9/10/90	5	1		70.2	N	
1	9/10/90	6	1		70.2	N	
1	9/10/90	7	1		70.1	N	
1	9/10/90	8	1		70.1	N	
1	9/10/90	9	1		70.2	N	
1	9/10/90	10	1		70.3	N	
1	9/10/90	11	1		70.4	N	
1	9/10/90	12	1		70.8	Y	
1	10/9/90	1	1		70	N	J
1	10/9/90	3	1		70	N	
1	10/9/90	4	1		70	N	
1	10/9/90	5	1		69	N	
1	10/9/90	6	1		69	N	
1	10/9/90	7	1		69	N	
1	10/9/90	8	1		69	N	
1	10/9/90	10	1		70	N	
1	10/9/90	11	1		70	N	
1	10/9/90	12	1		71	N	
1	10/22/90	1	1		69.9	N	J 890523512-20
1	10/22/90	3	1		69.9	N	
1	10/22/90	4	1		70	N	
1	10/22/90	5	1		70	N	
1	10/22/90	6	1		70	N	
1	10/22/90	7	1		70.1	N	
1	10/22/90	8	1		70.1	N	
1	10/22/90	9	1		70.1	N	
1	10/22/90	10	1		70.2	N	
1	10/22/90	11	1		70.2	N	
1	10/22/90	12	1		70.4	Y	
1	10/26/90	1	1		61.4	N	J-890523512-20
1	10/26/90	3	1		61.8	N	
1	10/26/90	4	1		61.9	N	
1	10/26/90	5	1		61.8	N	
1	10/26/90	6	1		61.9	N	
1	10/26/90	7	1		61.9	N	
1	10/26/90	8	1		62.3	N	
1	10/26/90	9	1		62.7	N	
1	10/26/90	10	1		63.2	N	
1	10/26/90	11	1		63.6	N	
1	10/26/90	12	1		64.3	Y	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	10/29/90	1	1		68.5	N	J-890523512-20
1	10/29/90	3	1		68.5	N	
1	10/29/90	4	1		69.4	N	
1	10/29/90	5	1		69.3	N	
1	10/29/90	6	1		69.4	N	
1	10/29/90	7	1		69.4	N	
1	10/29/90	8	1		69.5	N	
1	10/29/90	9	1		69.6	N	
1	10/29/90	10	1		69.7	N	
1	10/29/90	11	1		69.8	N	
1	10/29/90	12	1		70	Y	
1	11/5/90	1	1		69	N	J 890523512-20
1	11/5/90	3	1		69.1	N	
1	11/5/90	4	1		69.3	N	
1	11/5/90	5	1		69.4	N	
1	11/5/90	6	1		69.5	N	
1	11/5/90	7	1		69.5	N	
1	11/5/90	8	1		69.6	N	
1	11/5/90	9	1		69.6	N	
1	11/5/90	10	1		69.7	Y	
1	11/5/90	11	1		69.6	N	
1	11/5/90	12	1		69.6	N	
1	11/12/90	1	1		70.6	Y	2E-OP-021 TC#2 O/S
1	11/12/90	2	1			N	
1	11/12/90	3	1		68.5	N	
1	11/12/90	4	1		68.2	N	
1	11/12/90	5	1		68	N	
1	11/12/90	6	1		68	N	
1	11/12/90	7	1		68.1	N	
1	11/12/90	8	1		68.2	N	
1	11/12/90	9	1		68.2	N	
1	11/12/90	10	1		68.3	N	
1	11/12/90	11	1		68.3	N	
1	11/12/90	12	1		68.3	N	
1	11/18/90	1	1		67.8	N	J-HH-99A-J 890523512-20
1	11/18/90	3	1		66.9	N	
1	11/18/90	4	1		67.4	N	
1	11/18/90	5	1		67.4	N	
1	11/18/90	6	1		67.5	N	
1	11/18/90	7	1		67.5	N	
1	11/18/90	8	1		67.6	N	
1	11/18/90	9	1		67.7	Y	
1	11/18/90	10	1		67.7	N	
1	11/18/90	11	1		67.7	N	
1	11/18/90	12	1		67.6	N	
1	11/25/90	1	1		66.1	N	J-2E-OP-021
1	11/25/90	2	1		57	N	
1	11/25/90	3	1		67.5	N	
1	11/25/90	4	1		67.6	N	
1	11/25/90	5	1		67.7	N	
1	11/25/90	6	1		67.8	Y	
1	11/25/90	7	1		67.7	N	
1	11/25/90	8	1		67.7	N	
1	11/25/90	9	1		67.6	N	
1	11/25/90	10	1		67.5	N	
1	11/25/90	11	1		67.3	N	
1	11/25/90	12	1		67.1	N	
1	12/5/90	1	1		66.9	Y	J 890523512-20
1	12/5/90	3	1		66.5	N	
1	12/5/90	4	1		66.6	N	
1	12/5/90	5	1		66.7	N	
1	12/5/90	6	1		66.6	N	
1	12/5/90	7	1		66.6	N	
1	12/5/90	8	1		66.6	N	
1	12/5/90	9	1		66.7	N	
1	12/5/90	10	1		66.7	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	12/5/90	11	1		66.6	N	
1	12/5/90	12	1		66.3	N	
1	12/11/90	1	1		67.6	Y	J 890423320-11
1	12/11/90	3	1		66.6	N	
1	12/11/90	4	1		66.8	N	
1	12/11/90	5	1		66.8	N	
1	12/11/90	6	1		66.8	N	
1	12/11/90	7	1		66.8	N	
1	12/11/90	8	1		66.8	N	
1	12/11/90	9	1		66.9	N	
1	12/11/90	10	1		66.7	N	
1	12/11/90	11	1		66.7	N	
1	12/11/90	12	1		66.2	N	
1	12/15/90	1	1		66.5	Y	HH-99A-J
1	12/15/90	3	1		64.1	N	
1	12/15/90	4	1		63.9	N	
1	12/15/90	5	1		64.1	N	
1	12/15/90	6	1		64.3	N	
1	12/15/90	7	1		64.5	N	
1	12/15/90	8	1		64.5	N	
1	12/15/90	9	1		64.5	N	
1	12/15/90	10	1		64.5	N	
1	12/15/90	11	1		64.4	N	
1	12/15/90	12	1		63.7	N	
1	12/22/90	1	1		68	Y	J 890423320-11
1	12/22/90	2	1		68	N	
1	12/22/90	3	1		68	N	
1	12/22/90	4	1		68	N	
1	12/22/90	5	1		68	N	
1	12/22/90	6	1		68	N	
1	12/22/90	7	1		68	N	
1	12/22/90	8	1		67	N	
1	12/22/90	9	1		68	N	
1	12/22/90	10	1		67	N	
1	12/22/90	11	1		68	N	
1	12/22/90	12	1		67	N	
1	12/31/90	1	1		67.9	Y	J-2E-OP-021
1	12/31/90	3	1		67	N	
1	12/31/90	4	1		67.1	N	
1	12/31/90	5	1		67.2	N	
1	12/31/90	6	1		67.2	N	
1	12/31/90	7	1		67.3	N	
1	12/31/90	8	1		67.2	N	
1	12/31/90	9	1		67.3	N	
1	12/31/90	10	1		67.2	N	
1	12/31/90	11	1		67.1	N	
1	12/31/90	12	1		65.9	N	
1	1/6/91	1	1		67	Y	J
1	1/6/91	3	1		66	N	
1	1/6/91	4	1		66	N	
1	1/6/91	5	1		66	N	
1	1/6/91	6	1		66	N	
1	1/6/91	7	1		66	N	
1	1/6/91	8	1		66	N	
1	1/6/91	9	1		66	N	
1	1/6/91	10	1		66	N	
1	1/6/91	11	1		66	N	
1	1/6/91	12	1		65	N	
1	1/13/91	1	1		66.7	N	J 890423320-11
1	1/13/91	3	1		66.9	Y	
1	1/13/91	4	1		66.2	N	
1	1/13/91	5	1		66.1	N	
1	1/13/91	6	1		66.1	N	
1	1/13/91	7	1		66.1	N	
1	1/13/91	8	1		66.1	N	
1	1/13/91	9	1		66	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106						
THERMOCOUPLE DATA						
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP
1	1/13/91	10	1		66	N
1	1/13/91	11	1		66	N
1	1/13/91	12	1		65.8	N
1	1/19/91	1	1		67	N
1	1/19/91	3	1		65.7	Y
1	1/19/91	4	1		65.6	N
1	1/19/91	5	1		65.7	N
1	1/19/91	6	1		65.6	N
1	1/19/91	7	1		65.6	N
1	1/19/91	8	1		65.6	N
1	1/19/91	9	1		65.6	N
1	1/19/91	10	1		65.6	N
1	1/19/91	11	1		65.5	N
1	1/19/91	12	1		64.2	N
1	1/29/91	1	1		64	Y
1	1/29/91	3	1		63.2	N
1	1/29/91	4	1		63.1	N
1	1/29/91	5	1		63.2	N
1	1/29/91	6	1		63.3	N
1	1/29/91	7	1		63.3	N
1	1/29/91	8	1		63.3	N
1	1/29/91	9	1		62.8	N
1	1/29/91	10	1		61	N
1	1/29/91	11	1		60.8	N
1	1/29/91	12	1		60.7	N
1	2/3/91	1	1		63	Y
1	2/3/91	3	1		61	N
1	2/3/91	4	1		61	N
1	2/3/91	5	1		61	N
1	2/3/91	6	1		61	N
1	2/3/91	7	1		61	N
1	2/3/91	8	1		61	N
1	2/3/91	9	1		61	N
1	2/3/91	10	1		61	N
1	2/3/91	11	1		61	N
1	2/3/91	12	1		59	N
1	2/9/91	1	1		63.8	Y
1	2/9/91	3	1		62.6	N
1	2/9/91	4	1		62.6	N
1	2/9/91	5	1		62.7	N
1	2/9/91	6	1		62.7	N
1	2/9/91	7	1		62.7	N
1	2/9/91	8	1		62.7	N
1	2/9/91	9	1		62.7	N
1	2/9/91	10	1		62.7	N
1	2/9/91	11	1		62.4	N
1	2/9/91	12	1		60.9	N
1	2/16/91	1	1		63.6	Y
1	2/16/91	3	1		62	N
1	2/16/91	4	1		61.9	N
1	2/16/91	5	1		62	N
1	2/16/91	6	1		61.3	N
1	2/16/91	7	1		61.9	N
1	2/16/91	8	1		61.8	N
1	2/16/91	9	1		61.8	N
1	2/16/91	10	1		61.7	N
1	2/16/91	11	1		61.5	N
1	2/16/91	12	1		60.1	N
1	2/23/91	1	1		61.5	Y
1	2/23/91	3	1		59.7	N
1	2/23/91	4	1		59.6	N
1	2/23/91	5	1		59.7	N
1	2/23/91	6	1		59.7	N
1	2/23/91	7	1		59.7	N
1	2/23/91	8	1		59.8	N
1	2/23/91	9	1		59.6	N

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	2/23/91	10	1		59.5	N	
1	2/23/91	11	1		59.3	N	
1	2/23/91	12	1		58	N	
1	3/3/91	1	1		60.6	Y	J 890523512-47
1	3/3/91	3	1		59.9	N	
1	3/3/91	4	1		59.8	N	
1	3/3/91	5	1		59.8	N	
1	3/3/91	6	1		59.8	N	
1	3/3/91	7	1		59.8	N	
1	3/3/91	8	1		59.8	N	
1	3/3/91	9	1		59.6	N	
1	3/3/91	10	1		59.7	N	
1	3/3/91	11	1		59.5	N	
1	3/3/91	12	1		58.3	N	
1	3/9/91	1	1		65.7	Y	2E-OP-020
1	3/9/91	2	1		64.3	N	
1	3/9/91	3	1		64.2	N	
1	3/9/91	4	1		64.3	N	
1	3/9/91	5	1		64.2	N	
1	3/9/91	6	1		64.3	N	
1	3/9/91	7	1		64.3	N	
1	3/9/91	8	1		64.3	N	
1	3/9/91	9	1		64.2	N	
1	3/9/91	10	1		64.2	N	
1	3/9/91	11	1		64	N	
1	3/9/91	12	1		62.7	N	
1	3/17/91	1	1		63.2	Y	J 2E-OP-021 TC #2 O/S
1	3/17/91	3	1		61.7	N	
1	3/17/91	4	1		61.7	N	
1	3/17/91	5	1		61.7	N	
1	3/17/91	6	1		61.7	N	
1	3/17/91	7	1		61.6	N	
1	3/17/91	8	1		61.6	N	
1	3/17/91	9	1		61.6	N	
1	3/17/91	10	1		61.6	N	
1	3/17/91	11	1		61.4	N	
1	3/17/91	12	1		60.2	N	
1	3/23/91	1	1		63.6	Y	J 2E-OP-021
1	3/23/91	3	1		62.5	N	
1	3/23/91	4	1		62.5	N	
1	3/23/91	5	1		62.5	N	
1	3/23/91	6	1		62.4	N	
1	3/23/91	7	1		62.4	N	
1	3/23/91	8	1		62.3	N	
1	3/23/91	9	1		62.3	N	
1	3/23/91	10	1		62.2	N	
1	3/23/91	12	1		60.9	N	
1	3/30/91	1	1		62.2	Y	J 890523512-20
1	3/30/91	3	1		60.9	N	
1	3/30/91	4	1		60.9	N	
1	3/30/91	5	1		61.3	N	
1	3/30/91	6	1		61.2	N	
1	3/30/91	7	1		61.2	N	
1	3/30/91	8	1		61.4	N	
1	3/30/91	9	1		61.2	N	
1	3/30/91	10	1		61.2	N	
1	4/14/91	1	1		63	Y	J 890523512-20
1	4/14/91	2	1		62	N	
1	4/14/91	3	1		61.9	N	
1	4/14/91	4	1		61.9	N	
1	4/14/91	5	1		61.9	N	
1	4/14/91	6	1		61.9	N	
1	4/14/91	7	1		61.8	N	
1	4/14/91	8	1		61.8	N	
1	4/14/91	9	1		61.7	N	
1	4/14/91	10	1		61.9	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	4/20/91	1	1		61.9	Y	J 890523512-20
1	4/20/91	3	1		59.5	N	
1	4/20/91	4	1		60.2	N	
1	4/20/91	5	1		60.4	N	
1	4/20/91	6	1		60.4	N	
1	4/20/91	7	1		60.4	N	
1	4/20/91	8	1		60.4	N	
1	4/20/91	9	1		60.5	N	
1	4/20/91	10	1		60.5	N	
1	4/28/91	1	1		62.8	Y	J 890523512-20
1	4/28/91	3	1		62.1	N	
1	4/28/91	4	1		62	N	
1	4/28/91	5	1		62.1	N	
1	4/28/91	6	1		62	N	
1	4/28/91	7	1		62.1	N	
1	4/28/91	8	1		62	N	
1	4/28/91	9	1		62	N	
1	4/28/91	10	1		61.9	N	
1	5/5/91	1	1		62.7	Y	J 890523512-20
1	5/5/91	2	1		62.7	N	
1	5/5/91	3	1		62	N	
1	5/5/91	4	1		62	N	
1	5/5/91	5	1		62	N	
1	5/5/91	6	1		62.1	N	
1	5/5/91	7	1		62.1	N	
1	5/5/91	8	1		62.1	N	
1	5/5/91	9	1		62.1	N	
1	5/5/91	10	1		62.1	N	
1	5/12/91	1	1		62.3	Y	J
1	5/12/91	3	1		61.7	N	
1	5/12/91	4	1		61.8	N	
1	5/12/91	5	1		61.8	N	
1	5/12/91	6	1		61.9	N	
1	5/12/91	7	1		61.9	N	
1	5/12/91	8	1		62	N	
1	5/12/91	9	1		61.9	N	
1	5/12/91	10	1		61.9	N	
1	5/18/91	1	1		64.1	Y	J Keithley 872 2E-OP-020
1	5/18/91	3	1		63.3	N	
1	5/18/91	4	1		63.1	N	
1	5/18/91	5	1		63.1	N	
1	5/18/91	6	1		63.2	N	
1	5/18/91	7	1		63.2	N	
1	5/18/91	8	1		63.2	N	
1	5/18/91	9	1		63.4	N	
1	5/18/91	10	1		63.2	N	
1	5/25/91	1	1		63.6	Y	J 2E-OP-021
1	5/25/91	3	1		62.7	N	
1	5/25/91	4	1		62.7	N	
1	5/25/91	5	1		63	N	
1	5/25/91	6	1		63.1	N	
1	5/25/91	7	1		63.1	N	
1	5/25/91	8	1		63.1	N	
1	5/25/91	9	1		62.9	N	
1	5/25/91	10	1		62.8	N	
1	5/25/91	12	1		62.3	N	
1	6/1/91	1	1		62.5	Y	J 890423320-42
1	6/1/91	3	1		57.9	N	
1	6/1/91	4	1		61.7	N	
1	6/1/91	5	1		61.5	N	
1	6/1/91	6	1		61.7	N	
1	6/1/91	7	1		61.7	N	
1	6/1/91	8	1		61.6	N	
1	6/1/91	9	1		61.5	N	
1	6/1/91	10	1		61.5	N	
1	6/1/91	12	1		60.9	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	6/8/91	1	1		61.6	Y	J 890523512-20
1	6/8/91	2	1		54	N	
1	6/8/91	3	1		60.9	N	
1	6/8/91	4	1		61	N	
1	6/8/91	5	1		61.2	N	
1	6/8/91	6	1		61.2	N	
1	6/8/91	7	1		61.3	N	
1	6/8/91	8	1		61.3	N	
1	6/8/91	9	1		61.4	N	
1	6/8/91	10	1		61.4	N	
1	6/8/91	12	1		60.6	N	
1	6/15/91	1	1		64	Y	J 2E-OP-021
1	6/15/91	2	1		63.4	N	
1	6/15/91	3	1		61.9	N	
1	6/15/91	4	1		63.8	N	
1	6/15/91	5	1		63	N	
1	6/15/91	6	1		62.8	N	
1	6/15/91	7	1		62.5	N	
1	6/15/91	8	1		62.3	N	
1	6/15/91	9	1		62.4	N	
1	6/15/91	10	1		63.2	N	
1	6/15/91	11	1		63	N	
1	6/15/91	12	1		62.7	N	
1	6/23/91	1	1		64	N	J 2E-OP-021
1	6/23/91	2	1		63.8	N	
1	6/23/91	3	1		63.8	N	
1	6/23/91	4	1		63.8	N	
1	6/23/91	5	1		64	N	
1	6/23/91	6	1		64	N	
1	6/23/91	7	1		64.1	N	
1	6/23/91	8	1		64.1	N	
1	6/23/91	9	1		64.2	Y	
1	6/23/91	10	1		64.1	N	
1	6/23/91	12	1		63.8	N	
1	6/29/91	1	1		63.2	Y	J 890423320-42 TC#31112NG
1	6/29/91	3	1		62.8	N	
1	6/29/91	4	1		62.8	N	
1	6/29/91	5	1		62.8	N	
1	6/29/91	6	1		62.9	N	
1	6/29/91	7	1		62.9	N	
1	6/29/91	8	1		62.8	N	
1	6/29/91	9	1		62.8	N	
1	6/29/91	10	1		62.8	N	
1	7/6/91	1	1		63.5	Y	J 910126143-42 TC#211NG
1	7/6/91	3	1		63	N	
1	7/6/91	4	1		62.9	N	
1	7/6/91	5	1		62.9	N	
1	7/6/91	6	1		62.9	N	
1	7/6/91	7	1		63	N	
1	7/6/91	8	1		63	N	
1	7/6/91	9	1		63.1	N	
1	7/6/91	10	1		63.2	N	
1	7/6/91	12	1		63.2	N	
1	7/13/91	1	1		63.5	Y	J 910126143-42 TC#211NG
1	7/13/91	3	1		63	N	
1	7/13/91	4	1		63	N	
1	7/13/91	5	1		63	N	
1	7/13/91	6	1		62.9	N	
1	7/13/91	7	1		63	N	
1	7/13/91	8	1		63	N	
1	7/13/91	9	1		63.1	N	
1	7/13/91	10	1		63.2	N	
1	7/13/91	12	1		63.2	N	
1	7/20/91	1	1		62.3	N	J 910126143-64
1	7/20/91	3	1		62	N	
1	7/20/91	4	1		61.9	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	7/20/91	5	1		62	N	
1	7/20/91	6	1		62.1	N	
1	7/20/91	7	1		62.3	N	
1	7/20/91	8	1		62.4	N	
1	7/20/91	9	1		62.6	N	
1	7/20/91	10	1		62.7	Y	
1	7/20/91	12	1		62.5	N	
1	7/27/91	1	1		64.2	N	J 910126143-14 TC#211NG
1	7/27/91	3	1		64.4	N	
1	7/27/91	4	1		64.5	Y	
1	7/27/91	5	1		64.4	N	
1	7/27/91	6	1		64.3	N	
1	7/27/91	7	1		64.2	N	
1	7/27/91	8	1		64.3	N	
1	7/27/91	9	1		64.2	N	
1	7/27/91	10	1		64.2	N	
1	7/27/91	12	1		63.8	N	
1	7/31/91	1	1		63.5	Y	
1	7/31/91	3	1		63	N	
1	7/31/91	4	1		63	N	
1	7/31/91	5	1		63	N	
1	7/31/91	6	1		62.9	N	
1	7/31/91	7	1		63	N	
1	7/31/91	8	1		63	N	
1	7/31/91	9	1		63.1	N	
1	7/31/91	10	1		63.2	N	
1	7/31/91	12	1		63.2	N	
1	8/3/91	1	1		63.7	N	J 910126143-14 TC#211NG
1	8/3/91	3	1		63.8	N	
1	8/3/91	4	1		63.8	N	
1	8/3/91	5	1		63.9	Y	
1	8/3/91	6	1		63.8	N	
1	8/3/91	7	1		63.9	N	
1	8/3/91	8	1		63.9	N	
1	8/3/91	9	1		63.8	N	
1	8/3/91	10	1		63.8	N	
1	8/3/91	12	1		63.8	N	
1	8/10/91	1	1		66	Y	J 890523512-20 TC#211NG
1	8/10/91	3	1		66	N	
1	8/10/91	4	1		66	N	
1	8/10/91	5	1		66	N	
1	8/10/91	6	1		66	N	
1	8/10/91	7	1		66	N	
1	8/10/91	8	1		66	N	
1	8/10/91	9	1		66	N	
1	8/10/91	10	1		66	N	
1	8/10/91	12	1		66	N	
1	8/18/91	1	1		65.6	N	J 890523512-20
1	8/18/91	2	1		64.7	N	
1	8/18/91	3	1		65.8	N	
1	8/18/91	4	1		65.7	N	
1	8/18/91	5	1		68.7	Y	
1	8/18/91	6	1		66.5	N	
1	8/18/91	7	1		65.9	N	
1	8/18/91	8	1		65.9	N	
1	8/18/91	9	1		65.8	N	
1	8/18/91	10	1		65.8	N	
1	8/18/91	12	1		65.9	N	
1	8/24/91	1	1		66.8	N	J 890523512-2
1	8/24/91	3	1		66.8	N	
1	8/24/91	4	1		66.9	N	
1	8/24/91	5	1		66.9	N	
1	8/24/91	6	1		67	N	
1	8/24/91	7	1		67	N	
1	8/24/91	8	1		67	N	
1	8/24/91	9	1		67	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	8/24/91	10	1		67	N	
1	8/24/91	12	1		67.3	Y	
1	8/31/91	1	1		66.2	N	J-890423320-42
1	8/31/91	3	1		66.3	N	
1	8/31/91	4	1		66.1	N	
1	8/31/91	5	1		66.3	N	
1	8/31/91	6	1		66.4	N	
1	8/31/91	7	1		66.5	Y	
1	8/31/91	8	1		66.4	N	
1	8/31/91	9	1		66.4	N	
1	8/31/91	10	1		66.5	N	
1	8/31/91	12	1		66.5	Y	
1	9/8/91	1	1		66.2	N	J-890423320-42
1	9/8/91	3	1		66.3	N	
1	9/8/91	4	1		66.1	N	
1	9/8/91	5	1		66.3	N	
1	9/8/91	6	1		66.4	N	
1	9/8/91	7	1		66.4	N	
1	9/8/91	8	1		66.3	N	
1	9/8/91	9	1		66.5	Y	
1	9/8/91	10	1		66.5	Y	
1	9/8/91	11	1		66.5	Y	
1	9/8/91	13	1		66.5	Y	
1	9/15/91	1	1		66.7	N	J-910126143-75
1	9/15/91	3	1		67.3	N	
1	9/15/91	4	1		67.4	N	
1	9/15/91	5	1		67.5	N	
1	9/15/91	6	1		67.5	N	
1	9/15/91	7	1		67.6	N	
1	9/15/91	8	1		67.6	N	
1	9/15/91	9	1		67.6	N	
1	9/15/91	10	1		67.6	N	
1	9/15/91	12	1		67.7	Y	
1	9/21/91	1	1		67.1	N	J-910126143-75
1	9/21/91	3	1		67.3	N	
1	9/21/91	4	1		67.3	N	
1	9/21/91	5	1		67.5	N	
1	9/21/91	6	1		67.8	N	
1	9/21/91	7	1		67.9	N	
1	9/21/91	8	1		68	N	
1	9/21/91	9	1		68	N	
1	9/21/91	10	1		68.1	Y	
1	9/21/91	12	1		68.3	N	
1	9/28/91	1	1		67.9	N	J-KEITHLEY 872 #T1-059
1	9/28/91	3	1		68.2	N	
1	9/28/91	4	1		68.2	N	
1	9/28/91	5	1		68.3	N	
1	9/28/91	6	1		68.3	N	
1	9/28/91	7	1		68.4	N	
1	9/28/91	8	1		68.4	N	
1	9/28/91	9	1		68.4	N	
1	9/28/91	10	1		68.5	Y	
1	9/28/91	12	1		68.7	N	
1	10/5/91	1	1		68.6	N	J-910126143-42
1	10/5/91	3	1		69	N	
1	10/5/91	4	1		69	N	
1	10/5/91	5	1		69.2	Y	
1	10/5/91	6	1		69.1	N	
1	10/5/91	7	1		69.2	N	
1	10/5/91	8	1		69.2	N	
1	10/5/91	9	1		69.1	N	
1	10/5/91	10	1		69.2	N	
1	10/5/91	12	1		69.2	N	
1	10/12/91	1	1		67.6	N	J-TI023
1	10/12/91	3	1		67.8	N	
1	10/12/91	4	1		67.8	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	10/12/91	5	1		67.8	N	
1	10/12/91	6	1		67.7	N	
1	10/12/91	7	1		67.7	N	
1	10/12/91	8	1		67.7	N	
1	10/12/91	9	1		67.8	N	
1	10/12/91	10	1		67.8	N	
1	10/12/91	12	1		68.1	Y	
1	10/19/91	1	1		67.7	N	J-890523512-47 Retest Requested 10/24
1	10/19/91	2	1		62.8	N	
1	10/19/91	3	1		58	N	
1	10/19/91	4	1		68.1	N	
1	10/19/91	5	1		68.5	N	
1	10/19/91	7	1		67.9	N	
1	10/19/91	8	1		67.7	N	
1	10/19/91	9	1		67.7	N	
1	10/19/91	10	1		67.9	N	
1	10/19/91	12	1		67.8	N	
1	10/27/91	1	1		69.2	N	J-910126143-42
1	10/27/91	3	1		69.2	N	
1	10/27/91	4	1		69.2	N	
1	10/27/91	5	1		69.2	N	
1	10/27/91	6	1		69.3	Y	
1	10/27/91	7	1		69.3	N	
1	10/27/91	8	1		69.3	N	
1	10/27/91	9	1		69.3	N	
1	10/27/91	10	1		69.3	N	
1	11/2/91	1	1		67	Y	J-890523512-47 TC #211 O/S
1	11/2/91	3	1		67	N	
1	11/2/91	4	1		67	N	
1	11/2/91	5	1		67	N	
1	11/2/91	6	1		67	N	
1	11/2/91	7	1		67	N	
1	11/2/91	8	1		67	N	
1	11/2/91	9	1		67	N	
1	11/2/91	10	1		67	N	
1	11/2/91	12	1		67	N	
1	11/9/91	1	1			NO	READINGS J-3 ISSUED 11/10/91
1	11/17/91	1	1		67.9	Y	J-910126143-75 TC #23 O/S
1	11/17/91	4	1		61.5	N	
1	11/17/91	5	1		67	N	
1	11/17/91	6	1		66.9	N	
1	11/17/91	7	1		66	N	
1	11/17/91	8	1		61.8	N	
1	11/17/91	9	1		67.5	N	
1	11/17/91	10	1		66.9	N	
1	11/17/91	11	1		61.3	N	
1	11/17/91	12	1		67.3	N	
1	11/24/91	1	1		62.5	N	J-910126143-75 TC #211 NO GOOD
1	11/24/91	3	1		67.3	Y	
1	11/24/91	4	1		67.3	N	
1	11/24/91	5	1		67.3	N	
1	11/24/91	6	1		67.3	N	
1	11/24/91	7	1		67.3	N	
1	11/24/91	8	1		67.2	N	
1	11/24/91	9	1		67.3	N	
1	11/24/91	10	1		67.1	N	
1	11/24/91	12	1		66.8	N	
1	12/1/91	1	1		66.8	Y	J-910126143-14 TC #211 O/S
1	12/1/91	3	1		66.6	N	
1	12/1/91	4	1		66.7	N	
1	12/1/91	5	1		66.4	N	
1	12/1/91	6	1		66.7	N	
1	12/1/91	7	1		66.8	N	
1	12/1/91	8	1		66.7	N	
1	12/1/91	9	1		66.7	N	
1	12/1/91	10	1		66.7	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106 THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	12/1/91	12	1		66.2	N	
1	12/6/91	1	1		69.3	Y	J-910126143-29 TC #2 O/S
1	12/6/91	3	1		67.8	N	
1	12/6/91	4	1		67.7	N	
1	12/6/91	5	1		67.8	N	
1	12/6/91	6	1		67.8	N	
1	12/6/91	7	1		67.8	N	
1	12/6/91	8	1		67.9	N	
1	12/6/91	9	1		67.8	N	
1	12/6/91	10	1		67.9	N	
1	12/14/91	1	1		68	Y	J-910126143-29 TC #211 O/S
1	12/14/91	3	1		67.4	N	
1	12/14/91	4	1		67.3	N	
1	12/14/91	5	1		67.2	N	
1	12/14/91	6	1		67.1	N	
1	12/14/91	7	1		67.1	N	
1	12/14/91	8	1		67	N	
1	12/14/91	9	1		67	N	
1	12/14/91	10	1		67	N	
1	12/14/91	12	1		66.2	N	
1	12/20/91	1	1		68	Y	J-910126143-29 TC #211 O/S
1	12/20/91	3	1		67.2	N	
1	12/20/91	4	1		67.2	N	
1	12/20/91	5	1		67.2	N	
1	12/20/91	6	1		67.3	N	
1	12/20/91	7	1		67.3	N	
1	12/20/91	8	1		67.3	N	
1	12/20/91	9	1		67.3	N	
1	12/20/91	10	1		67.3	N	
1	12/20/91	12	1		66.2	N	
1	12/29/91	1	1		67.3	Y	J-910126143-29 TC #211 O/S
1	12/29/91	3	1		66.4	N	
1	12/29/91	4	1		66.3	N	
1	12/29/91	5	1		66.3	N	
1	12/29/91	6	1		66.3	N	
1	12/29/91	7	1		66.4	N	
1	12/29/91	8	1		66.3	N	
1	12/29/91	9	1		66.3	N	
1	12/29/91	10	1		66.3	N	
1	12/29/91	12	1		65.1	N	
1	1/2/92	1	1		66	N	J-910126143-29
1	1/2/92	2	1		67	Y	
1	1/2/92	3	1		65.2	N	
1	1/2/92	4	1		65.1	N	
1	1/2/92	5	1		65.2	N	
1	1/2/92	6	1		65.2	N	
1	1/2/92	7	1		65.2	N	
1	1/2/92	8	1		65.1	N	
1	1/2/92	9	1		65.1	N	
1	1/2/92	10	1		64.8	N	
1	1/2/92	11	1		65.1	N	
1	1/2/92	12	1		65.1	N	
1	1/11/92	1	1		65.3	Y	910126143-14
1	1/11/92	3	1		64.5	N	
1	1/11/92	4	1		64.4	N	
1	1/11/92	5	1		64.4	N	
1	1/11/92	6	1		64.4	N	
1	1/11/92	7	1		64.4	N	
1	1/11/92	8	1		64.4	N	
1	1/11/92	9	1		64.4	N	
1	1/11/92	10	1		64.3	N	
1	1/11/92	12	1		62.9	N	
1	1/28/92	1	1			N	ACCESS RESTRICTED 1/28 - 2/22 DUE TO BATTERY FUME INCIDENT
1	2/29/92	1	1		64.7	N	J+I-038/9101261H332
1	2/29/92	2	1		60.4	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106						
THERMOCOUPLE DATA						
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP
1	2/29/92	3	1		64.6	N
1	2/29/92	4	1		66.6	N
1	2/29/92	5	1		67.9	Y
1	2/29/92	6	1		67.1	N
1	2/29/92	7	1		63.4	N
1	2/29/92	8	1		63.4	N
1	2/29/92	9	1		63.4	N
1	2/29/92	10	1		63.3	N
1	2/29/92	12	1		62	N
1	3/8/92	3	1		62	Y
1	3/8/92	4	1		62	N
1	3/8/92	5	1		62	N
1	3/8/92	6	1		61.9	N
1	3/8/92	7	1		62	N
1	3/8/92	8	1		61.9	N
1	3/8/92	9	1		61.8	N
1	3/8/92	10	1		61.8	N
1	3/8/92	12	1		60.4	N
1	3/14/92	1	1		63.3	Y
1	3/14/92	3	1		61	N
1	3/14/92	4	1		60.5	N
1	3/14/92	5	1		58.5	N
1	3/14/92	6	1		60.2	N
1	3/14/92	7	1		60.7	N
1	3/14/92	8	1		60.7	N
1	3/14/92	9	1		60.5	N
1	3/14/92	10	1		60.5	N
1	3/14/92	12	1		58.2	N
1	3/24/92	1	1		60.6	N
1	3/24/92	2	1		62.9	N
1	3/24/92	3	1		60.8	N
1	3/24/92	4	1		66.9	Y
1	3/24/92	5	1		61.1	N
1	3/24/92	6	1		60.9	N
1	3/24/92	7	1		60.9	N
1	3/24/92	8	1		60.8	N
1	3/24/92	9	1		60.6	N
1	3/24/92	10	1		60.7	N
1	3/24/92	11	1		46.9	N
1	3/24/92	12	1		58.8	N
1	3/28/92	1	1		63.3	Y
1	3/28/92	3	1		62.4	N
1	3/28/92	4	1		62.4	N
1	3/28/92	5	1		62.4	N
1	3/28/92	6	1		62.4	N
1	3/28/92	7	1		62.4	N
1	3/28/92	8	1		62.4	N
1	3/28/92	9	1		62.3	N
1	3/28/92	10	1		62.2	N
1	3/28/92	12	1		61.2	N
1	4/3/92	1	1		62.4	N
1	4/3/92	3	1		60.7	N
1	4/3/92	4	1		61.1	N
1	4/3/92	5	1		61.3	N
1	4/3/92	6	1		61.4	N
1	4/3/92	7	1		61.4	N
1	4/3/92	8	1		61.4	N
1	4/3/92	9	1		61.3	N
1	4/3/92	10	1		61.3	N
1	4/3/92	12	1		60	N
1	4/11/92	1	1		63.3	Y
1	4/11/92	3	1		62.2	N
1	4/11/92	4	1		62.3	N
1	4/11/92	5	1		62.3	N
1	4/11/92	6	1		62.4	N
1	4/11/92	7	1		62.3	N

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	4/11/92	8	1		62.3	N	
1	4/11/92	9	1		62.2	N	
1	4/11/92	10	1		62.2	N	
1	4/17/92	1	1		63.4	Y	
1	4/17/92	3	1		62.4	N	
1	4/17/92	4	1		62.5	N	
1	4/17/92	5	1		62.6	N	
1	4/17/92	6	1		62.4	N	
1	4/17/92	7	1		62.5	N	
1	4/17/92	8	1		62.4	N	
1	4/17/92	9	1		62.3	N	
1	4/17/92	10	1		62.4	N	
1	4/25/92	1	1		63.6	N	J 89052351220
1	4/25/92	2	1		64.9	Y	
1	4/25/92	3	1		63.1	N	
1	4/25/92	4	1		62.9	N	
1	4/25/92	5	1		62.9	N	
1	4/25/92	6	1		62.8	N	
1	4/25/92	7	1		63	N	
1	4/25/92	8	1		62.9	N	
1	4/25/92	9	1		62.8	N	
1	4/30/92	1	1		60.7	Y	J 890523512-47
1	4/30/92	3	1		59.9	N	
1	4/30/92	4	1		60	N	
1	4/30/92	5	1		60.1	N	
1	4/30/92	6	1		60.1	N	
1	4/30/92	7	1		60.1	N	
1	4/30/92	8	1		60.1	N	
1	4/30/92	9	1		60	N	
1	4/30/92	10	1		59.8	N	
1	4/30/92	12	1		59.3	N	
1	5/8/92	1	1		62.8	Y	J 910126143-48 TC #21012 O/S
1	5/8/92	3	1		62.2	N	
1	5/8/92	4	1		62.2	N	
1	5/8/92	5	1		62.2	N	
1	5/8/92	6	1		62.2	N	
1	5/8/92	7	1		62.2	N	
1	5/8/92	8	1		62.1	N	
1	5/8/92	9	1		62.1	N	
1	5/8/92	12	1		61.5	N	
1	5/16/92	1	1		62.7	Y	J 910126143-32
1	5/16/92	3	1		62.2	N	
1	5/16/92	4	1		62	N	
1	5/16/92	5	1		62	N	
1	5/16/92	6	1		62.2	N	
1	5/16/92	7	1		62.2	N	
1	5/16/92	8	1		62.1	N	
1	5/16/92	9	1		62	N	
1	5/16/92	12	1		61.5	N	
1	5/24/92	1	1		61.8	Y	J 890523512-47
1	5/24/92	3	1		61.2	N	
1	5/24/92	4	1		61	N	
1	5/24/92	5	1		61.5	N	
1	5/24/92	6	1		61.4	N	
1	5/24/92	7	1		61.5	N	
1	5/24/92	8	1		61.3	N	
1	5/24/92	9	1		61.2	N	
1	5/24/92	10	1		61.2	N	
1	5/24/92	12	1		60.6	N	
1	5/28/92	1	1		61.9	Y	J 890523512-47
1	5/28/92	3	1		61.2	N	
1	5/28/92	4	1		61.1	N	
1	5/28/92	5	1		61.6	N	
1	5/28/92	6	1		61.4	N	
1	5/28/92	7	1		61.6	N	
1	5/28/92	8	1		61.3	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	5/28/92	9	1		61.3	N	
1	5/28/92	10	1		61.2	N	
1	5/28/92	12	1		60.7	N	
1	6/5/92	1	1		61.6	Y	J 910126143-50
1	6/5/92	3	1		61.2	N	
1	6/5/92	4	1		61.2	N	
1	6/5/92	5	1		61.5	N	
1	6/5/92	6	1		61.6	N	
1	6/5/92	7	1		61.5	N	
1	6/5/92	8	1		61.5	N	
1	6/5/92	9	1		61.5	N	
1	6/5/92	10	1		61.5	N	
1	6/5/92	12	1		61.2	N	
1	6/13/92	1	1		68	N	J 890523512-47
1	6/13/92	3	1		69.1	Y	
1	6/13/92	4	1		69	N	
1	6/13/92	5	1		68.9	N	
1	6/13/92	6	1		68.7	N	
1	6/13/92	7	1		68	N	
1	6/13/92	8	1		68.1	N	
1	6/13/92	9	1		68	N	
1	6/13/92	10	1		68	N	
1	6/20/92	1	1		63.1	N	J 910126143-48
1	6/20/92	2	1		63.1	N	
1	6/20/92	3	1		63.1	N	
1	6/20/92	4	1		63.4	N	
1	6/20/92	5	1		64	N	
1	6/20/92	6	1		63.1	N	
1	6/20/92	7	1		63.5	N	
1	6/20/92	8	1		63.4	N	
1	6/20/92	9	1		63.1	N	
1	6/20/92	10	1		63.1	N	
1	6/20/92	11	1		64.3	Y	
1	6/20/92	12	1		62.9	N	
1	6/28/92	1	1		63.2	N	J TI-042 910126143-66
1	6/28/92	3	1		62.9	N	
1	6/28/92	4	1		62.9	N	
1	6/28/92	5	1		63.1	N	
1	6/28/92	6	1		63.3	N	
1	6/28/92	7	1		63.3	N	
1	6/28/92	8	1		63.4	Y	
1	6/28/92	9	1		63.4	N	
1	6/28/92	10	1		63.3	N	
1	6/28/92	12	1		63.2	N	
1	7/3/92	1	1		62.6	Y	J TI-041
1	7/3/92	3	1		62.1	N	
1	7/3/92	4	1		62.2	N	
1	7/3/92	5	1		62.3	N	
1	7/3/92	6	1		62.3	N	
1	7/3/92	7	1		62.4	N	
1	7/3/92	8	1		62.4	N	
1	7/3/92	9	1		62.4	N	
1	7/3/92	10	1		62.5	Y	
1	7/3/92	12	1		62.4	N	
1	7/10/92	1	1		64.3	N	J 910126143-42
1	7/10/92	3	1		64.4	N	
1	7/10/92	4	1		64.4	N	
1	7/10/92	5	1		64.5	N	
1	7/10/92	6	1		64.6	N	
1	7/10/92	7	1		64.6	Y	
1	7/10/92	8	1		64.6	N	
1	7/10/92	9	1		64.6	N	
1	7/10/92	10	1		64.6	N	
1	7/10/92	12	1		64.6	N	
1	7/18/92	1	1		63.5	N	J 910126143-42
1	7/18/92	3	1		63.5	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	7/18/92	4	1		63.8	Y	
1	7/18/92	5	1		63.6	N	
1	7/18/92	6	1		63.6	N	
1	7/18/92	7	1		63.5	N	
1	7/18/92	8	1		63.5	N	
1	7/18/92	9	1		63.5	N	
1	7/18/92	10	1		63.5	N	
1	7/18/92	12	1		63.8	N	
1	7/24/92	1	1		65.5	N	J HH-99A 910126143-29
1	7/24/92	3	1		65.3	N	
1	7/24/92	4	1		65.1	N	
1	7/24/92	5	1		65.3	N	
1	7/24/92	6	1		65.3	N	
1	7/24/92	7	1		65.5	N	
1	7/24/92	8	1		65.6	N	
1	7/24/92	9	1		65.7	N	
1	7/24/92	10	1		65.7	Y	
1	7/24/92	12	1		65.4	N	
1	8/1/92	1	1		65.2	N	J TI-04
1	8/1/92	3	1		65.5	N	
1	8/1/92	4	1		65.5	N	
1	8/1/92	5	1		65.5	N	
1	8/1/92	6	1		65.5	N	
1	8/1/92	7	1		65.5	N	
1	8/1/92	8	1		65.6	N	
1	8/1/92	9	1		65.5	N	
1	8/1/92	10	1		65.5	N	
1	8/1/92	12	1		65.7	Y	
1	8/7/92	1	1		64.7	N	J 890423320-42
1	8/7/92	3	1		65	N	
1	8/7/92	4	1		65	N	
1	8/7/92	5	1		65	N	
1	8/7/92	6	1		65.1	N	
1	8/7/92	7	1		65.2	N	
1	8/7/92	8	1		65.3	N	
1	8/7/92	9	1		65.3	N	
1	8/7/92	10	1		65.4	N	
1	8/7/92	12	1		65.7	Y	
1	8/21/92	1	1		65.5	N	J 890423320-42
1	8/21/92	2	1		65.8	N	
1	8/21/92	3	1		65.8	N	
1	8/21/92	4	1		65.8	N	
1	8/21/92	5	1		65.9	N	
1	8/21/92	6	1		65.9	N	
1	8/21/92	7	1		66	N	
1	8/21/92	8	1		66	N	
1	8/21/92	9	1		66	N	
1	8/21/92	10	1		66	N	
1	8/21/92	11	1		66	N	
1	8/21/92	12	1		66.2	Y	
1	8/30/92	1	1		65.7	N	J 890423320-42
1	8/30/92	2	1		66	N	
1	8/30/92	3	1		65.9	N	
1	8/30/92	4	1		65.9	N	
1	8/30/92	5	1		66	N	
1	8/30/92	6	1		66	N	
1	8/30/92	7	1		66.1	N	
1	8/30/92	8	1		66.2	N	
1	8/30/92	9	1		66.1	N	
1	8/30/92	10	1		66.1	N	
1	8/30/92	11	1		66.1	N	
1	8/30/92	12	1		66.3	Y	
1	9/6/92	1	1		65.5	N	J 890423320-42
1	9/6/92	2	1		66.4	N	
1	9/6/92	3	1		66.1	N	
1	9/6/92	4	1		66.1	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106						
THERMOCOUPLE DATA						
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP
1	9/6/92	5	1		66.3	N
1	9/6/92	6	1		66.3	N
1	9/6/92	7	1		66.3	N
1	9/6/92	8	1		66.3	N
1	9/6/92	9	1		66.3	N
1	9/6/92	10	1		66.3	N
1	9/6/92	11	1		66.4	N
1	9/6/92	12	1		66.6	Y
1	9/12/92	1	1		67.7	N
1	9/12/92	2	1		67.9	N
1	9/12/92	3	1		68	N
1	9/12/92	4	1		68	N
1	9/12/92	5	1		68.1	N
1	9/12/92	6	1		68.2	N
1	9/12/92	7	1		68.2	N
1	9/12/92	8	1		68.3	N
1	9/12/92	9	1		68.2	N
1	9/12/92	10	1		68.2	N
1	9/12/92	11	1		68.2	N
1	9/12/92	12	1		68.6	Y
1	9/20/92	1	1		68.3	N
1	9/20/92	2	1		68.5	N
1	9/20/92	3	1		68.5	N
1	9/20/92	4	1		68.5	N
1	9/20/92	5	1		68.5	N
1	9/20/92	6	1		68.5	N
1	9/20/92	7	1		68.6	N
1	9/20/92	8	1		68.6	N
1	9/20/92	9	1		68.7	N
1	9/20/92	10	1		68.7	N
1	9/20/92	11	1		68.7	N
1	9/20/92	12	1		69.1	Y
1	9/26/92	1	1		66.5	N
1	9/26/92	2	1		66.8	N
1	9/26/92	3	1		66.7	N
1	9/26/92	4	1		66.7	N
1	9/26/92	5	1		66.8	N
1	9/26/92	6	1		66.9	N
1	9/26/92	7	1		66.9	N
1	9/26/92	8	1		66.9	N
1	9/26/92	9	1		66.9	N
1	9/26/92	10	1		66.7	N
1	9/26/92	11	1		66.8	N
1	9/26/92	12	1		67.3	Y
1	10/1/92	1	1		66.7	N
1	10/1/92	2	1		67.2	N
1	10/1/92	3	1		67.1	N
1	10/1/92	4	1		67	N
1	10/1/92	5	1		67.3	N
1	10/1/92	6	1		67.3	N
1	10/1/92	7	1		67.4	N
1	10/1/92	8	1		67.4	N
1	10/1/92	9	1		67.5	N
1	10/1/92	10	1		67.5	N
1	10/1/92	11	1		67.6	N
1	10/1/92	12	1		67.7	Y
1	10/10/92	1	1		67.5	N
1	10/10/92	2	1		67.9	N
1	10/10/92	3	1		67.8	N
1	10/10/92	4	1		67.9	N
1	10/10/92	5	1		68	N
1	10/10/92	6	1		68	N
1	10/10/92	7	1		68.1	N
1	10/10/92	8	1		68.1	N
1	10/10/92	9	1		68.2	N
1	10/10/92	10	1		68.2	N

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	10/10/92	11	1		68.2	N	
1	10/10/92	12	1		68.4	Y	
1	10/18/92	1	1		69.4	N	J 910125143-40
1	10/18/92	2	1		69.6	N	
1	10/18/92	3	1		69.5	N	
1	10/18/92	4	1		69.5	N	
1	10/18/92	5	1		69.5	N	
1	10/18/92	6	1		69.6	N	
1	10/18/92	7	1		69.6	N	
1	10/18/92	8	1		69.6	N	
1	10/18/92	9	1		69.7	N	
1	10/18/92	10	1		69.7	N	
1	10/18/92	11	1		69.9	Y	
1	10/23/92	1	1		68.5	N	J 910126143-66
1	10/23/92	2	1		68.6	N	
1	10/23/92	3	1		68.2	N	
1	10/23/92	4	1		68.2	N	
1	10/23/92	5	1		68.4	N	
1	10/23/92	6	1		68.5	N	
1	10/23/92	7	1		68.7	N	
1	10/23/92	8	1		68.7	N	
1	10/23/92	9	1		68.7	N	
1	10/23/92	10	1		68.7	N	
1	10/23/92	11	1		68.8	Y	
1	10/23/92	12	1		68.8	N	
1	10/28/92	1	1		69.5	N	J 91012614366
1	10/28/92	2	1		69.6	N	
1	10/28/92	3	1		69.5	N	
1	10/28/92	4	1		69.5	N	
1	10/28/92	5	1		69.5	N	
1	10/28/92	6	1		69.5	N	
1	10/28/92	7	1		69.5	N	
1	10/28/92	8	1		69.5	N	
1	10/28/92	9	1		69.6	N	
1	10/28/92	10	1		69.7	Y	
1	10/28/92	11	1		69.6	N	
1	10/28/92	12	1		69.7	N	
1	11/7/92	1	1		68.3	Y	J 910126143-48
1	11/7/92	2	1		68.2	N	
1	11/7/92	3	1		68	N	
1	11/7/92	4	1		68	N	
1	11/7/92	5	1		68.1	N	
1	11/7/92	6	1		68.2	N	
1	11/7/92	7	1		68.3	N	
1	11/7/92	8	1		68.3	N	
1	11/7/92	9	1		68.3	N	
1	11/7/92	10	1		68.3	N	
1	11/7/92	11	1		68.2	N	
1	11/7/92	12	1		68.1	N	
1	11/15/92	1	1		67.2	N	J 890423320-42
1	11/15/92	2	1		67	N	
1	11/15/92	3	1		66.8	N	
1	11/15/92	4	1		66.8	N	
1	11/15/92	5	1		66.8	N	
1	11/15/92	6	1		66.9	N	
1	11/15/92	7	1		66.9	N	
1	11/15/92	8	1		67	N	
1	11/15/92	9	1		67.1	N	
1	11/15/92	10	1		65.9	N	
1	11/15/92	11	1		67	N	
1	11/15/92	12	1		66.8	N	
1	11/21/92	1	1		68.2	Y	J 910126143-14
1	11/21/92	2	1		67.9	N	
1	11/21/92	3	1		67.7	N	
1	11/21/92	4	1		67.8	N	
1	11/21/92	5	1		67.8	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106 THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	11/21/92	6	1		67.8	N	
1	11/21/92	7	1		67.7	N	
1	11/21/92	8	1		67.7	N	
1	11/21/92	9	1		67.8	N	
1	11/21/92	10	1		67.8	N	
1	11/21/92	11	1		67.9	N	
1	11/21/92	12	1		67.7	N	
1	11/27/92	1	1		69.8	Y	J 890523512-20
1	11/27/92	2	1		69.5	N	
1	11/27/92	3	1		69.3	N	
1	11/27/92	4	1		69.3	N	
1	11/27/92	5	1		69.3	N	
1	11/27/92	6	1		69.4	N	
1	11/27/92	7	1		69.4	N	
1	11/27/92	8	1		69.4	N	
1	11/27/92	9	1		69.5	N	
1	11/27/92	10	1		69.4	N	
1	11/27/92	11	1		69.4	N	
1	11/27/92	12	1		68.8	N	
1	12/5/92	1	1		67.2	Y	J 890423320-42
1	12/5/92	2	1		66.7	N	
1	12/5/92	3	1		65.8	N	
1	12/5/92	4	1		66.4	N	
1	12/5/92	5	1		66.4	N	
1	12/5/92	6	1		66.4	N	
1	12/5/92	7	1		66.4	N	
1	12/5/92	8	1		66.4	N	
1	12/5/92	9	1		66.4	N	
1	12/5/92	10	1		66.3	N	
1	12/5/92	11	1		66.2	N	
1	12/5/92	12	1		65.6	N	
1	12/12/92	1	1		68.2	Y	J 910126143-40
1	12/12/92	2	1		67.6	N	
1	12/12/92	3	1		67.6	N	
1	12/12/92	4	1		67.4	N	
1	12/12/92	5	1		67.4	N	
1	12/12/92	6	1		67.5	N	
1	12/12/92	7	1		67.6	N	
1	12/12/92	8	1		67.6	N	
1	12/12/92	9	1		67.3	N	
1	12/12/92	10	1		67.5	N	
1	12/12/92	11	1		67.4	N	
1	12/12/92	12	1		66.4	N	
1	12/19/92	1	1		67.8	Y	J 910126143-14
1	12/19/92	2	1		67.1	N	
1	12/19/92	3	1		66.8	N	
1	12/19/92	4	1		66.9	N	
1	12/19/92	5	1		66.8	N	
1	12/19/92	6	1		66.9	N	
1	12/19/92	7	1		66.9	N	
1	12/19/92	8	1		67	N	
1	12/19/92	9	1		66.9	N	
1	12/19/92	10	1		66.9	N	
1	12/19/92	11	1		67.7	N	
1	12/19/92	12	1		65.7	N	
1	12/25/92	1	1		67.8	Y	J 890523512-20
1	12/25/92	2	1		67.2	N	
1	12/25/92	4	1		66.9	N	
1	12/25/92	5	1		67.1	N	
1	12/25/92	6	1		67.2	N	
1	12/25/92	7	1		67.2	N	
1	12/25/92	8	1		67.2	N	
1	12/25/92	9	1		67.1	N	
1	12/25/92	10	1		67	N	
1	12/25/92	11	1		66.7	N	
1	12/25/92	12	1		65.5	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	1/1/93	1	1		66	Y	J 890523512-47
1	1/1/93	2	1		65.1	N	
1	1/1/93	3	1		64.8	N	
1	1/1/93	4	1		64.9	N	
1	1/1/93	5	1		64.9	N	
1	1/1/93	6	1		64.9	N	
1	1/1/93	7	1		64.9	N	
1	1/1/93	8	1		64.9	N	
1	1/1/93	9	1		64.8	N	
1	1/1/93	10	1		64.8	N	
1	1/1/93	11	1		64.8	N	
1	1/1/93	12	1		63.5	N	
1	1/9/93	1	1		67.5	Y	J 890523512-47
1	1/9/93	2	1		66.5	N	
1	1/9/93	3	1		66.3	N	
1	1/9/93	4	1		66	N	
1	1/9/93	5	1		66.1	N	
1	1/9/93	6	1		66.2	N	
1	1/9/93	7	1		66.2	N	
1	1/9/93	8	1		66.2	N	
1	1/9/93	9	1		66.2	N	
1	1/9/93	10	1		66.1	N	
1	1/9/93	11	1		65.9	N	
1	1/9/93	12	1		64.6	N	
1	1/18/93	1	1		65.7	Y	
1	1/18/93	2	1		65.3	N	
1	1/18/93	4	1		65.4	N	
1	1/18/93	5	1		65.4	N	
1	1/18/93	6	1		65.3	N	
1	1/18/93	7	1		65.3	N	
1	1/18/93	8	1		65.2	N	
1	1/18/93	9	1		65.2	N	
1	1/18/93	11	1		64.9	N	
1	1/18/93	12	1		62.1	N	
1	1/23/93	1	1		67	Y	J 890523512-20
1	1/23/93	2	1		65.7	N	
1	1/23/93	3	1		65.5	N	
1	1/23/93	4	1		65.5	N	
1	1/23/93	5	1		65.4	N	
1	1/23/93	6	1		65.4	N	
1	1/23/93	7	1		65.5	N	
1	1/23/93	8	1		65.5	N	
1	1/23/93	9	1		65.6	N	
1	1/23/93	10	1		65.7	N	
1	1/23/93	11	1		65.6	N	
1	1/23/93	12	1		64	N	
1	1/31/93	1	1		65	Y	J 910126143-40
1	1/31/93	2	1		63.8	N	
1	1/31/93	3	1		63.6	N	
1	1/31/93	4	1		63.5	N	
1	1/31/93	5	1		63.5	N	
1	1/31/93	6	1		63.5	N	
1	1/31/93	7	1		63.5	N	
1	1/31/93	8	1		63.5	N	
1	1/31/93	9	1		63.4	N	
1	1/31/93	10	1		63.7	N	
1	1/31/93	11	1		63.2	N	
1	1/31/93	12	1		61.7	N	
1	2/5/93	1	1		64.3	Y	J 910126143-50
1	2/5/93	2	1		62.9	N	
1	2/5/93	3	1		62.7	N	
1	2/5/93	4	1		62.7	N	
1	2/5/93	5	1		62.8	N	
1	2/5/93	6	1		62.7	N	
1	2/5/93	7	1		62.8	N	
1	2/5/93	8	1		62.8	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	2/5/93	9	1		62.7	N	
1	2/5/93	10	1		62.6	N	
1	2/5/93	11	1		62.4	N	
1	2/5/93	12	1		60.8	N	
1	2/12/93	1	1		61.7	Y	J 890423320-42
1	2/12/93	2	1		60.4	N	
1	2/12/93	3	1		60.1	N	
1	2/12/93	4	1		60.2	N	
1	2/12/93	5	1		60.2	N	
1	2/12/93	6	1		60.3	N	
1	2/12/93	7	1		60.3	N	
1	2/12/93	8	1		60.3	N	
1	2/12/93	9	1		60.3	N	
1	2/12/93	10	1		60.2	N	
1	2/12/93	11	1		60	N	
1	2/12/93	12	1		58.5	N	
1	2/18/93	1	1		64.2	Y	J TI-040
1	2/18/93	2	1		62.9	N	
1	2/18/93	4	1		62.6	N	
1	2/18/93	5	1		62.6	N	
1	2/18/93	6	1		62.6	N	
1	2/18/93	7	1		62.6	N	
1	2/18/93	8	1		62.5	N	
1	2/18/93	9	1		62.5	N	
1	2/18/93	10	1		62.5	N	
1	2/18/93	11	1		62.2	N	
1	2/18/93	12	1		60.8	N	
1	2/26/93	1	1		65	Y	J 900925741-79
1	2/26/93	2	1		64	N	
1	2/26/93	3	1		64	N	
1	2/26/93	4	1		64	N	
1	2/26/93	5	1		64	N	
1	2/26/93	6	1		64	N	
1	2/26/93	7	1		64	N	
1	2/26/93	8	1		64	N	
1	2/26/93	9	1		64	N	
1	2/26/93	10	1		64	N	
1	2/26/93	11	1		63	N	
1	2/26/93	12	1		62	N	
1	3/5/93	1	1		60.9	Y	J 900925741-79
1	3/5/93	2	1		59.7	N	
1	3/5/93	3	1		59.4	N	
1	3/5/93	4	1		59.3	N	
1	3/5/93	5	1		59.5	N	
1	3/5/93	6	1		59.5	N	
1	3/5/93	7	1		59.5	N	
1	3/5/93	8	1		59.5	N	
1	3/5/93	9	1		59.5	N	
1	3/5/93	10	1		59.4	N	
1	3/5/93	11	1		59.2	N	
1	3/5/93	12	1		57.6	N	
1	3/11/93	1	1		60.4	Y	J 890423320-42
1	3/11/93	2	1		59.2	N	
1	3/11/93	3	1		59	N	
1	3/11/93	4	1		59	N	
1	3/11/93	5	1		59	N	
1	3/11/93	6	1		59	N	
1	3/11/93	7	1		59	N	
1	3/11/93	8	1		59	N	
1	3/11/93	9	1		58.9	N	
1	3/11/93	10	1		58.8	N	
1	3/11/93	11	1		58.5	N	
1	3/11/93	12	1		57.1	N	
1	3/19/93	1	1		61.7	Y	J 910126143-14
1	3/19/93	2	1		60.3	N	
1	3/19/93	3	1		60	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	3/19/93	4	1		60	N	
1	3/19/93	5	1		60	N	
1	3/19/93	6	1		60	N	
1	3/19/93	7	1		60	N	
1	3/19/93	8	1		60	N	
1	3/19/93	9	1		59.9	N	
1	3/19/93	10	1		59.9	N	
1	3/19/93	11	1		59.6	N	
1	3/19/93	12	1		58.2	N	
1	3/27/93	1	1		62	Y	J 910126143-32
1	3/27/93	2	1		60.7	N	
1	3/27/93	3	1		60.5	N	
1	3/27/93	4	1		60.4	N	
1	3/27/93	5	1		60.4	N	
1	3/27/93	6	1		60.3	N	
1	3/27/93	7	1		60.4	N	
1	3/27/93	8	1		60.3	N	
1	3/27/93	9	1		60.2	N	
1	3/27/93	10	1		60.1	N	
1	3/27/93	11	1		59.9	N	
1	3/27/93	12	1		59.7	N	
1	4/2/93	1	1		61.7	Y	J 910126143-32
1	4/2/93	2	1		60.4	N	
1	4/2/93	3	1		60.4	N	
1	4/2/93	4	1		60.4	N	
1	4/2/93	5	1		60.4	N	
1	4/2/93	6	1		60.4	N	
1	4/2/93	7	1		60.4	N	
1	4/2/93	8	1		60.4	N	
1	4/2/93	9	1		60.4	N	
1	4/2/93	10	1		60.1	N	
1	4/2/93	11	1		59.9	N	
1	4/2/93	12	1		58.6	N	
1	4/9/93	1	1		61.8	Y	J 910126143-50
1	4/9/93	2	1		60.7	N	
1	4/9/93	3	1		60.3	N	
1	4/9/93	4	1		60.3	N	
1	4/9/93	5	1		60.3	N	
1	4/9/93	6	1		60.3	N	
1	4/9/93	7	1		60.3	N	
1	4/9/93	8	1		60.3	N	
1	4/9/93	9	1		60.2	N	
1	4/9/93	10	1		60.2	N	
1	4/9/93	11	1		60	N	
1	4/9/93	12	1		58.9	N	
1	4/17/93	1	1		61.9	Y	J 910126143-64
1	4/17/93	2	1		60.8	N	
1	4/17/93	3	1		60.6	N	
1	4/17/93	4	1		60.5	N	
1	4/17/93	5	1		60.6	N	
1	4/17/93	6	1		60.6	N	
1	4/17/93	7	1		60.6	N	
1	4/17/93	8	1		60.6	N	
1	4/17/93	9	1		60.5	N	
1	4/17/93	10	1		60.4	N	
1	4/17/93	11	1		60.1	N	
1	4/17/93	12	1		59.2	N	
1	4/24/93	1	1		61.6	Y	J 910126143-50
1	4/24/93	2	1		60.5	N	
1	4/24/93	3	1		60.3	N	
1	4/24/93	4	1		60.3	N	
1	4/24/93	5	1		60.3	N	
1	4/24/93	6	1		60.3	N	
1	4/24/93	7	1		60.3	N	
1	4/24/93	8	1		60.3	N	
1	4/24/93	9	1		60.2	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	4/24/93	10	1		59.9	N	
1	4/24/93	11	1		59.9	N	
1	4/24/93	12	1		59.1	N	
1	5/1/93	1	1		61.1	Y	J 910126143-50
1	5/1/93	2	1		60.1	N	
1	5/1/93	3	1		59.9	N	
1	5/1/93	4	1		59.9	N	
1	5/1/93	5	1		60	N	
1	5/1/93	6	1		60	N	
1	5/1/93	7	1		59.9	N	
1	5/1/93	8	1		60	N	
1	5/1/93	9	1		59.9	N	
1	5/1/93	10	1		59.8	N	
1	5/1/93	11	1		59.7	N	
1	5/1/93	12	1		58.8	N	
1	5/8/93	1	1		61.4	Y	J 910126143-50
1	5/8/93	2	1		60.4	N	
1	5/8/93	3	1		60.1	N	
1	5/8/93	4	1		60.1	N	
1	5/8/93	5	1		60.1	N	
1	5/8/93	6	1		60.1	N	
1	5/8/93	7	1		60.1	N	
1	5/8/93	8	1		60	N	
1	5/8/93	9	1		60	N	
1	5/8/93	10	1		60	N	
1	5/8/93	11	1		59.9	N	
1	5/8/93	12	1		59.3	N	
1	5/13/93	1	1		59.6	Y	J 910126143-50
1	5/13/93	2	1		58.8	N	
1	5/13/93	3	1		58.2	N	
1	5/13/93	4	1		57.9	N	
1	5/13/93	5	1		58.6	N	
1	5/13/93	6	1		58.7	N	
1	5/13/93	7	1		58.7	N	
1	5/13/93	8	1		58.5	N	
1	5/13/93	9	1		58.5	N	
1	5/13/93	10	1		58.5	N	
1	5/13/93	11	1		58.2	N	
1	5/13/93	12	1		57.6	N	
1	5/22/93	1	1		61.7	Y	J 910126143-64
1	5/22/93	2	1		60.9	N	
1	5/22/93	3	1		60.7	N	
1	5/22/93	4	1		60.6	N	
1	5/22/93	5	1		60.7	N	
1	5/22/93	6	1		60.7	N	
1	5/22/93	7	1		60.6	N	
1	5/22/93	8	1		60.6	N	
1	5/22/93	9	1		60.7	N	
1	5/22/93	10	1		60.6	N	
1	5/22/93	11	1		60.6	N	
1	5/22/93	12	1		60	N	
1	5/29/93	1	1		61.6	Y	J 910126143-32
1	5/29/93	2	1		61	N	
1	5/29/93	3	1		60.8	N	
1	5/29/93	4	1		60.7	N	
1	5/29/93	5	1		60.7	N	
1	5/29/93	6	1		60.7	N	
1	5/29/93	7	1		60.7	N	
1	5/29/93	8	1		60.7	N	
1	5/29/93	9	1		60.6	N	
1	5/29/93	10	1		60.5	N	
1	5/29/93	11	1		60.4	N	
1	5/29/93	12	1		59.9	N	
1	6/3/93	1	1		61.6	Y	J TI-040
1	6/3/93	2	1		60.9	N	
1	6/3/93	3	1		60.9	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106 THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	6/3/93	4	1		60.9	N	
1	6/3/93	5	1		60.9	N	
1	6/3/93	6	1		60.9	N	
1	6/3/93	7	1		60.9	N	
1	6/3/93	8	1		60.8	N	
1	6/3/93	9	1		60.8	N	
1	6/3/93	10	1		60.7	N	
1	6/3/93	11	1		60.5	N	
1	6/3/93	12	1		60.1	N	
1	6/12/93	1	1		61.6	Y	J 890523512-20
1	6/12/93	2	1		61.2	N	
1	6/12/93	4	1		60.5	N	
1	6/12/93	5	1		60.7	N	
1	6/12/93	6	1		60.7	N	
1	6/12/93	7	1		60.8	N	
1	6/12/93	8	1		60.8	N	
1	6/12/93	9	1		60.9	N	
1	6/12/93	10	1		61	N	
1	6/12/93	11	1		60.8	N	
1	6/12/93	12	1		60.5	N	
1	6/19/93	1	1		62.4	Y	J 890523512-20
1	6/19/93	2	1		62	N	
1	6/19/93	3	1		62	N	
1	6/19/93	4	1		62	N	
1	6/19/93	5	1		62	N	
1	6/19/93	6	1		62	N	
1	6/19/93	7	1		62	N	
1	6/19/93	8	1		62	N	
1	6/19/93	9	1		61.9	N	
1	6/19/93	10	1		61.7	N	
1	6/19/93	11	1		61.8	N	
1	6/19/93	12	1		61.5	N	
1	6/23/93	1	1		62.2	Y	J 910126143-14
1	6/23/93	2	1		62	N	
1	6/23/93	3	1		61.9	N	
1	6/23/93	4	1		61.9	N	
1	6/23/93	5	1		62	N	
1	6/23/93	6	1		61.9	N	
1	6/23/93	7	1		61.9	N	
1	6/23/93	8	1		61.9	N	
1	6/23/93	9	1		61.9	N	
1	6/23/93	10	1		61.8	N	
1	6/23/93	11	1		61.8	N	
1	6/23/93	12	1		61.6	N	
1	7/8/93	1	1		63.8	Y	J 910126143-66
1	7/8/93	2	1		63.6	N	
1	7/8/93	3	1		63.6	N	
1	7/8/93	4	1		63.6	N	
1	7/8/93	5	1		63.7	N	
1	7/8/93	6	1		63.6	N	
1	7/8/93	7	1		63.7	N	
1	7/8/93	8	1		63.7	N	
1	7/8/93	9	1		63.6	N	
1	7/8/93	10	1		63.6	N	
1	7/8/93	11	1		63.5	N	
1	7/8/93	12	1		63.4	N	
1	7/16/93	1	1		63.7	Y	J 910125143-48
1	7/16/93	2	1		63.6	N	
1	7/16/93	3	1		63.5	N	
1	7/16/93	4	1		63.5	N	
1	7/16/93	5	1		63.5	N	
1	7/16/93	6	1		63.5	N	
1	7/16/93	7	1		63.5	N	
1	7/16/93	8	1		63.6	N	
1	7/16/93	9	1		63.4	N	
1	7/16/93	10	1		63.4	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	7/16/93	11	1		63.3	N	
1	7/16/93	12	1		63.3	N	
1	7/24/93	1	1		63.1	Y	J 910126143-42
1	7/24/93	2	1		63.1	N	
1	7/24/93	3	1		63	N	
1	7/24/93	4	1		63	N	
1	7/24/93	5	1		63.1	N	
1	7/24/93	6	1		63	N	
1	7/24/93	7	1		63	N	
1	7/24/93	8	1		63	N	
1	7/24/93	9	1		62.9	N	
1	7/24/93	10	1		62.9	N	
1	7/24/93	11	1		62.8	N	
1	7/24/93	12	1		62.8	N	
1	7/31/93	1	1		63.2	Y	J TI-039 910126143-50
1	7/31/93	2	1		63.2	N	
1	7/31/93	3	1		62.6	N	
1	7/31/93	4	1		63.1	N	
1	7/31/93	5	1		63.2	N	
1	7/31/93	6	1		63.1	N	
1	7/31/93	7	1		63.2	N	
1	7/31/93	8	1		63.1	N	
1	7/31/93	9	1		63.1	N	
1	7/31/93	10	1		63	N	
1	7/31/93	11	1		63	N	
1	7/31/93	12	1		63	N	
1	8/5/93	1	1		64	Y	J 910126143-39 TC#3 O/S
1	8/5/93	2	1		64	N	
1	8/5/93	3	1			N	
1	8/5/93	4	1		63.8	N	
1	8/5/93	5	1		63.8	N	
1	8/5/93	6	1		63.8	N	
1	8/5/93	7	1		63.8	N	
1	8/5/93	8	1		63.8	N	
1	8/5/93	9	1		63.8	N	
1	8/5/93	10	1		63.7	N	
1	8/5/93	11	1		63.7	N	
1	8/5/93	12	1		63.7	N	
1	8/13/93	1	1		63.8	N	
1	8/13/93	2	1		63.9	N	
1	8/13/93	3	1		63.8	N	
1	8/13/93	4	1		63.8	N	
1	8/13/93	5	1		63.9	N	
1	8/13/93	6	1		63.9	N	
1	8/13/93	7	1		64	Y	
1	8/13/93	8	1		64	N	
1	8/13/93	9	1		63.9	N	
1	8/13/93	10	1		63.9	N	
1	8/13/93	11	1		63.8	N	
1	8/13/93	12	1		64	N	
1	8/20/93	1	1		63.9	N	J 910126143-48
1	8/20/93	2	1		64.1	N	
1	8/20/93	3	1		63.8	N	
1	8/20/93	4	1		63.9	N	
1	8/20/93	5	1		64	N	
1	8/20/93	6	1		64.1	N	
1	8/20/93	7	1		64.2	Y	
1	8/20/93	8	1		64.1	N	
1	8/20/93	9	1		64.1	N	
1	8/20/93	10	1		64.2	N	
1	8/20/93	11	1		64.2	N	
1	8/20/93	12	1		64.2	N	
1	8/26/93	1	1		64.1	N	J 9101265143-48
1	8/26/93	2	1		64.3	Y	
1	8/26/93	3	1		64.1	N	
1	8/26/93	4	1		64.1	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106 THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	8/26/93	5	1		64.2	N	
1	8/26/93	6	1		64.2	N	
1	8/26/93	7	1		64.3	N	
1	8/26/93	8	1		64.3	N	
1	8/26/93	9	1		64.2	N	
1	8/26/93	10	1		64.2	N	
1	8/26/93	11	1		64.2	N	
1	8/26/93	12	1		64.3	N	
1	9/3/93	1	1		66	N	J 910126143-48
1	9/3/93	2	1		66	N	
1	9/3/93	3	1		66	N	
1	9/3/93	4	1		67	N	
1	9/3/93	5	1		67	N	
1	9/3/93	6	1		67	N	
1	9/3/93	7	1		66	N	
1	9/3/93	8	1		66	N	
1	9/3/93	9	1		66	N	
1	9/3/93	10	1		66	N	
1	9/3/93	11	1		66	N	
1	9/3/93	12	1		68	Y	
1	9/9/93	1	1		65.7	N	J 910126143-39
1	9/9/93	2	1		65.9	Y	
1	9/9/93	3	1		65.7	N	
1	9/9/93	4	1		65.7	N	
1	9/9/93	5	1		65.8	N	
1	9/9/93	6	1		65.7	N	
1	9/9/93	7	1		65.8	N	
1	9/9/93	8	1		65.8	N	
1	9/9/93	9	1		65.8	N	
1	9/9/93	10	1		65.7	N	
1	9/9/93	11	1		65.8	N	
1	9/9/93	12	1		65.9	N	
1	9/16/93	1	1		67	Y	J 900925741-79
1	9/16/93	2	1		67	N	
1	9/16/93	3	1		67	N	
1	9/16/93	4	1		67	N	
1	9/16/93	5	1		67	N	
1	9/16/93	6	1		67	N	
1	9/16/93	7	1		67	N	
1	9/16/93	8	1		67	N	
1	9/16/93	9	1		67	N	
1	9/16/93	10	1		67	N	
1	9/16/93	11	1		67	N	
1	9/16/93	12	1		67	N	
1	9/25/93	1	1		65.7	N	J TI-040
1	9/25/93	2	1		65.8	N	
1	9/25/93	3	1		65.6	N	
1	9/25/93	4	1		65.8	N	
1	9/25/93	5	1		65.8	N	
1	9/25/93	6	1		66	N	
1	9/25/93	7	1		65.9	N	
1	9/25/93	8	1		66	N	
1	9/25/93	9	1		66.2	N	
1	9/25/93	10	1		66.3	N	
1	9/25/93	11	1		66.5	N	
1	9/25/93	12	1		66.8	Y	
1	9/30/93	1	1		66.7	N	J 910426540-36
1	9/30/93	2	1		66.5	N	
1	9/30/93	3	1		66.4	N	
1	9/30/93	4	1		66.4	N	
1	9/30/93	5	1		66.4	N	
1	9/30/93	6	1		66.4	N	
1	9/30/93	7	1		66.3	N	
1	9/30/93	8	1		66.4	N	
1	9/30/93	9	1		66.7	N	
1	9/30/93	10	1		66.9	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	9/30/93	11	1		67.2	N	
1	9/30/93	12	1		67.7	Y	
1	10/1/93	1	1		66.5	N	J 910426540-36
1	10/1/93	2	1		66.8	N	
1	10/1/93	3	1		66.4	N	
1	10/1/93	4	1		66.2	N	
1	10/1/93	5	1		66.3	N	
1	10/1/93	6	1		66.3	N	
1	10/1/93	7	1		66.1	N	
1	10/1/93	8	1		66.4	N	
1	10/1/93	9	1		66.7	N	
1	10/1/93	10	1		67	N	
1	10/1/93	11	1		67.4	N	
1	10/1/93	12	1		67.9	Y	
1	10/8/93	1	1		67	N	
1	10/8/93	2	1		68	N	
1	10/8/93	3	1		68	N	
1	10/8/93	4	1		67	N	
1	10/8/93	5	1		69	N	
1	10/8/93	6	1		69	N	
1	10/8/93	7	1		69	N	
1	10/8/93	8	1		69	N	
1	10/8/93	9	1		70	Y	
1	10/8/93	10	1		70	N	
1	10/8/93	11	1		69	N	
1	10/8/93	12	1		69	N	
1	10/13/93	1	1		65.8	N	J 890423320-42
1	10/13/93	2	1		65.7	N	
1	10/13/93	3	1		65.7	N	
1	10/13/93	4	1		65.6	N	
1	10/13/93	5	1		65.6	N	
1	10/13/93	6	1		65.7	N	
1	10/13/93	7	1		65.6	N	
1	10/13/93	8	1		65.6	N	
1	10/13/93	9	1		65.7	N	
1	10/13/93	10	1		65.8	N	
1	10/13/93	11	1		65	N	
1	10/13/93	12	1		66.4	Y	
1	10/20/93	1	1		67	N	J 910126143-29
1	10/20/93	2	1		66.8	N	
1	10/20/93	3	1		66.6	N	
1	10/20/93	4	1		66.5	N	
1	10/20/93	5	1		66.2	N	
1	10/20/93	6	1		66.1	N	
1	10/20/93	7	1		65.9	N	
1	10/20/93	8	1		66.1	N	
1	10/20/93	9	1		66.4	N	
1	10/20/93	10	1		66.8	N	
1	10/20/93	11	1		67.4	N	
1	10/20/93	12	1		68.1	Y	
1	10/26/93	1	1		67.9	N	J 910126143-50
1	10/26/93	2	1		67.2	N	
1	10/26/93	3	1		67.4	N	
1	10/26/93	4	1		67.3	N	
1	10/26/93	5	1		67.2	N	
1	10/26/93	6	1		67.2	N	
1	10/26/93	7	1		67.1	N	
1	10/26/93	8	1		67.2	N	
1	10/26/93	9	1		67.3	N	
1	10/26/93	10	1		67.5	N	
1	10/26/93	11	1		67.7	N	
1	10/26/93	12	1		68.1	Y	
1	11/7/93	1	1		67.3	Y	J 910126143-50
1	11/7/93	2	1		67.3	N	
1	11/7/93	3	1		66.5	N	
1	11/7/93	4	1		66.5	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	11/7/93	5	1		67	N	
1	11/7/93	6	1		66.9	N	
1	11/7/93	7	1		67.1	N	
1	11/7/93	8	1		67.1	N	
1	11/7/93	9	1		67.1	N	
1	11/7/93	10	1		67.1	N	
1	11/7/93	11	1		67.1	N	
1	11/7/93	12	1		67.1	N	
1	11/12/93	1	1		70.1	Y	J TI-049
1	11/12/93	2	1		69.9	N	
1	11/12/93	3	1		69.9	N	
1	11/12/93	4	1		69.5	N	
1	11/12/93	5	1		69.5	N	
1	11/12/93	6	1		69.4	N	
1	11/12/93	7	1		69.5	N	
1	11/12/93	8	1		69.6	N	
1	11/12/93	9	1		69.5	N	
1	11/12/93	10	1		69.5	N	
1	11/12/93	11	1		69.4	N	
1	11/12/93	12	1		69.3	N	
1	11/22/93	1	1		72	N	J 777-13-20-010 rechk req & received 11-22
1	11/22/93	2	1		75	N	
1	11/22/93	3	1		74	N	
1	11/22/93	4	1		74	N	
1	11/22/93	5	1		75	N	
1	11/22/93	6	1		72	N	
1	11/22/93	7	1		73	N	
1	11/22/93	9	1		75	N	
1	11/22/93	10	1		72	N	
1	11/22/93	11	1		74	N	
1	11/22/93	12	1		73	N	
1	11/22/93	1	2		69.3	N	J 910126143-50 RECHECK FROM 11/22
1	11/22/93	2	2		69.9	Y	
1	11/22/93	3	2		69.6	N	
1	11/22/93	4	2		69.7	N	
1	11/22/93	5	2		69.6	N	
1	11/22/93	6	2		69.7	N	
1	11/22/93	7	2		69.7	N	
1	11/22/93	8	2		69.7	N	
1	11/22/93	9	2		69.6	N	
1	11/22/93	10	2		69.6	N	
1	11/22/93	11	2		69.6	N	
1	11/22/93	12	2		69.6	N	
1	11/25/93	1	1		65	Y	J 890423320-42 TC 3 O/S
1	11/25/93	2	1		64.9	N	
1	11/25/93	4	1		64.5	N	
1	11/25/93	5	1		64.7	N	
1	11/25/93	6	1		64.7	N	
1	11/25/93	7	1		64.8	N	
1	11/25/93	8	1		64.8	N	
1	11/25/93	9	1		64.7	N	
1	11/25/93	10	1		64.5	N	
1	11/25/93	11	1		63.3	N	
1	11/25/93	12	1		62.6	N	
1	12/6/93	1	1		67.3	Y	J 910126143-50
1	12/6/93	2	1		66.8	N	
1	12/6/93	3	1		66.6	N	
1	12/6/93	4	1		66.6	N	
1	12/6/93	5	1		66.6	N	
1	12/6/93	6	1		66.5	N	
1	12/6/93	7	1		66.6	N	
1	12/6/93	8	1		66.6	N	
1	12/6/93	9	1		66.6	N	
1	12/6/93	10	1		66.5	N	
1	12/6/93	11	1		66.3	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-106							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	12/6/93	12	1		66.5	N	
1	12/10/93	1	1		63.9	Y	J 890423390-42 TC 3 O/S R-7
1	12/10/93	2	1		63.3	N	
1	12/10/93	4	1		63	N	
1	12/10/93	5	1		63	N	
1	12/10/93	6	1		62.9	N	
1	12/10/93	7	1		63	N	
1	12/10/93	8	1		62.9	N	
1	12/10/93	9	1		63	N	
1	12/10/93	10	1		62.4	N	
1	12/10/93	11	1		62.3	N	
2	12/10/93	1	1		63.5	Y	K
2	12/10/93	2	1		63.2	N	
2	12/10/93	3	1		62.9	N	
2	12/10/93	4	1		62.8	N	
2	12/10/93	5	1		62.7	N	
2	12/10/93	6	1		62.6	N	
2	12/10/93	7	1		63	N	
2	12/10/93	8	1		63.1	N	
2	12/10/93	9	1		63.1	N	
2	12/10/93	10	1		63.1	N	
2	12/10/93	11	1		63	N	
2	12/10/93	12	1		62.2	N	
1	12/20/93	1	1			N	JT1-011 TC 1 O/S
1	12/20/93	2	1		65.9	Y	
1	12/20/93	3	1		65.7	N	
1	12/20/93	4	1		65.8	N	
1	12/20/93	5	1		65.8	N	
1	12/20/93	6	1		65.8	N	
1	12/20/93	7	1		65.8	N	
1	12/20/93	8	1		65.8	N	
1	12/20/93	9	1		65.8	N	
1	12/20/93	10	1		65.7	N	
1	12/20/93	11	1		65.7	N	
1	12/20/93	12	1		64.7	N	
1	12/27/93	1	1		66.3	Y	J 910126143-32
1	12/27/93	2	1		65.6	N	
1	12/27/93	3	1		65.3	N	
1	12/27/93	4	1		65.3	N	
1	12/27/93	5	1		65.2	N	
1	12/27/93	6	1		65.3	N	
1	12/27/93	7	1		65.2	N	
1	12/27/93	8	1		65.2	N	
1	12/27/93	9	1		65.2	N	
1	12/27/93	10	1		65.2	N	
1	12/27/93	11	1		65.1	N	
1	12/27/93	12	1		64	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-107							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	7/25/75	1	1		64	N	
1	7/25/75	2	1		64	N	
1	7/25/75	3	1		64	N	
1	7/25/75	4	1		64	N	
1	7/25/75	5	1		63	N	
1	7/25/75	6	1		63	N	
1	7/25/75	7	1		63	N	
1	7/25/75	8	1		64	N	
1	7/25/75	9	1		64	N	
1	7/25/75	10	1		64	N	
1	7/25/75	11	1		64	N	
1	7/25/75	12	1		65	N	
1	7/25/75	13	1		66	N	
1	7/25/75	14	1		70	Y	
1	2/10/76	1	1		70	N	
1	2/10/76	2	1		70	N	
1	2/10/76	3	1		70	N	
1	2/10/76	4	1		71	Y	
1	2/10/76	5	1		70	N	
1	2/10/76	6	1		69	N	
1	2/10/76	7	1		68	N	
1	2/10/76	8	1		68	N	
1	2/10/76	9	1		68	N	
1	2/10/76	10	1		68	N	
1	2/10/76	11	1		68	N	
1	2/10/76	12	1		69	N	
1	2/10/76	13	1		64	N	
1	2/10/76	14	1		58	N	
1	4/1/76	1	1		70	Y	
1	4/1/76	2	1		70	N	
1	4/1/76	3	1		70	N	
1	4/1/76	4	1		70	N	
1	4/1/76	5	1		69	N	
1	4/1/76	6	1		66	N	
1	4/1/76	7	1		66	N	
1	4/1/76	8	1		66	N	
1	4/1/76	9	1		66	N	
1	4/1/76	10	1		66	N	
1	4/1/76	11	1		67	N	
1	4/1/76	12	1		66	N	
1	7/20/76	1	1		59	Y	
1	7/20/76	2	1		58	N	
1	7/20/76	3	1		57	N	
1	7/20/76	4	1		57	N	
1	7/20/76	5	1		56	N	
1	7/20/76	6	1		56	N	
1	7/20/76	7	1		56	N	
1	7/20/76	8	1		56	N	
1	7/20/76	9	1		56	N	
1	7/20/76	10	1		56	N	
1	7/20/76	11	1		56	N	
1	7/20/76	12	1		56	N	
1	1/11/77	1	1		88	Y	
1	1/11/77	2	1		88	N	
1	1/11/77	3	1		88	N	
1	1/11/77	4	1		88	N	
1	1/11/77	5	1		88	N	
1	1/11/77	6	1		88	N	
1	1/11/77	7	1		87	N	
1	1/11/77	8	1		86	N	
1	1/11/77	9	1		86	N	
1	1/11/77	10	1		86	N	
1	1/11/77	11	1		86	N	
1	1/11/77	12	1		86	N	
1	7/26/77	1	1		58	Y	
1	7/26/77	2	1		58	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-107						
THERMOCOUPLE DATA						
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP
1	7/26/77	3	1		57	N
1	7/26/77	4	1		57	N
1	7/26/77	5	1		57	N
1	7/26/77	6	1		57	N
1	7/26/77	7	1		57	N
1	7/26/77	8	1		57	N
1	7/26/77	9	1		57	N
1	7/26/77	10	1		57	N
1	7/26/77	11	1		57	N
1	7/26/77	12	1		57	N
1	10/24/77	1	1		69	N
1	10/24/77	2	1		69	N
1	10/24/77	3	1		69	N
1	10/24/77	4	1		69	N
1	10/24/77	5	1		70	N
1	10/24/77	6	1		70	N
1	10/24/77	7	1		72	N
1	10/24/77	8	1		73	Y
1	10/24/77	9	1		73	N
1	10/24/77	10	1		73	N
1	10/24/77	11	1		73	N
1	10/24/77	12	1		73	N
1	1/16/78	1	1		71	Y
1	1/16/78	2	1		71	N
1	1/16/78	3	1		71	N
1	1/16/78	4	1		71	N
1	1/16/78	5	1		69	N
1	1/16/78	6	1		68	N
1	1/16/78	7	1		68	N
1	1/16/78	8	1		68	N
1	1/16/78	9	1		68	N
1	1/16/78	10	1		68	N
1	1/16/78	11	1		68	N
1	1/16/78	12	1		68	N
1	4/24/78	1	1		82	Y
1	4/24/78	2	1		79	N
1	4/24/78	3	1		75	N
1	4/24/78	4	1		75	N
1	4/24/78	5	1		72	N
1	4/24/78	6	1		68	N
1	4/24/78	7	1		68	N
1	4/24/78	8	1		66	N
1	4/24/78	9	1		65	N
1	4/24/78	10	1		65	N
1	4/24/78	11	1		65	N
1	4/24/78	12	1		65	N
1	7/16/78	1	1		66	N
1	7/16/78	2	1		67	N
1	7/16/78	3	1		66	N
1	7/16/78	4	1		65	N
1	7/16/78	5	1		67	N
1	7/16/78	6	1		68	Y
1	7/16/78	7	1		66	N
1	7/16/78	8	1		66	N
1	7/16/78	9	1		66	N
1	7/16/78	10	1		65	N
1	7/16/78	11	1		67	N
1	7/16/78	12	1		66	N
1	11/9/78	1	1		83	N
1	11/9/78	2	1		84	Y
1	11/9/78	3	1		82	N
1	11/9/78	4	1		81	N
1	11/9/78	5	1		81	N
1	11/9/78	6	1		80	N
1	11/9/78	7	1		80	N
1	11/9/78	8	1		80	N

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-107							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	11/9/78	9	1		80	N	
1	11/9/78	10	1		80	N	
1	11/9/78	11	1		80	N	
1	11/9/78	12	1		79	N	
1	1/5/79	1	1		69	Y	
1	1/5/79	2	1		69	N	
1	1/5/79	3	1		69	N	
1	1/5/79	4	1		69	N	
1	1/5/79	5	1		69	N	
1	1/5/79	6	1		66	N	
1	1/5/79	7	1		66	N	
1	1/5/79	8	1		66	N	
1	1/5/79	9	1		66	N	
1	1/5/79	10	1		66	N	
1	1/5/79	11	1		66	N	
1	1/5/79	12	1		66	N	
1	1/5/79	13	1		64	N	
1	1/5/79	14	1		57	N	
1	4/7/79	1	1		70	Y	
1	4/7/79	2	1		70	N	
1	4/7/79	3	1		70	N	
1	4/7/79	4	1		68	N	
1	4/7/79	5	1		67	N	
1	4/7/79	6	1		64	N	
1	4/7/79	7	1		62	N	
1	4/7/79	8	1		62	N	
1	4/7/79	9	1		62	N	
1	4/7/79	10	1		62	N	
1	4/7/79	11	1		62	N	
1	4/7/79	12	1		61	N	
1	4/7/79	13	1		58	N	
1	4/7/79	14	1		54	N	
1	7/1/79	1	1		68	Y	
1	7/1/79	2	1		68	N	
1	7/1/79	3	1		67	N	
1	7/1/79	4	1		66	N	
1	7/1/79	5	1		65	N	
1	7/1/79	6	1		65	N	
1	7/1/79	7	1		65	N	
1	7/1/79	8	1		65	N	
1	7/1/79	9	1		65	N	
1	7/1/79	10	1		65	N	
1	7/1/79	11	1		65	N	
1	7/1/79	12	1		64	N	
1	7/1/79	13	1		65	N	
1	7/1/79	14	1		68	N	
1	10/8/79	1	1		67	N	
1	10/8/79	2	1		67	N	
1	10/8/79	3	1		67	N	
1	10/8/79	4	1		68	N	
1	10/8/79	5	1		69	N	
1	10/8/79	6	1		70	N	
1	10/8/79	7	1		70	N	
1	10/8/79	8	1		70	N	
1	10/8/79	9	1		70	N	
1	10/8/79	10	1		71	N	
1	10/8/79	11	1		71	N	
1	10/8/79	12	1		71	N	
1	10/8/79	13	1		72	Y	
1	10/8/79	14	1		71	N	
1	1/9/80	1	1		82	Y	
1	1/9/80	2	1		82	N	
1	1/9/80	3	1		82	N	
1	1/9/80	4	1		82	N	
1	1/9/80	5	1		82	N	
1	1/9/80	6	1		80	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-107							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	1/9/80	7	1		79	N	
1	1/9/80	8	1		79	N	
1	1/9/80	9	1		79	N	
1	1/9/80	10	1		79	N	
1	1/9/80	11	1		79	N	
1	1/9/80	12	1		79	N	
1	1/9/80	13	1		76	N	
1	1/9/80	14	1		70	N	
1	4/4/80	1	1		84	Y	
1	4/4/80	2	1		82	N	
1	4/4/80	3	1		82	N	
1	4/4/80	4	1		80	N	
1	4/4/80	5	1		76	N	
1	4/4/80	6	1		75	N	
1	4/4/80	7	1		73	N	
1	4/4/80	8	1		69	N	
1	4/4/80	9	1		69	N	
1	4/4/80	10	1		68	N	
1	4/4/80	11	1		66	N	
1	4/4/80	12	1		65	N	
1	10/26/80	2	1		72	N	
1	10/26/80	3	1		72	N	
1	10/26/80	4	1		73	N	
1	10/26/80	5	1		74	N	
1	10/26/80	6	1		75	N	
1	10/26/80	7	1		75	N	
1	10/26/80	8	1		75	N	
1	10/26/80	9	1		76	Y	
1	10/26/80	10	1		76	N	
1	10/26/80	12	1		76	N	
1	10/26/80	13	1		76	N	
1	10/26/80	14	1		74	N	
1	1/10/81	2	1		79	N	
1	1/10/81	3	1		80	Y	
1	1/10/81	4	1		80	N	
1	1/10/81	5	1		80	N	
1	1/10/81	6	1		79	N	
1	1/10/81	7	1		77	N	
1	1/10/81	8	1		78	N	
1	1/10/81	9	1		78	N	
1	1/10/81	10	1		78	N	
1	1/10/81	11	1		78	N	
1	1/10/81	12	1		74	N	
1	8/10/81	2	1		69	N	
1	8/10/81	3	1		69	N	
1	8/10/81	4	1		69	N	
1	8/10/81	5	1		69	N	
1	8/10/81	6	1		70	Y	
1	8/10/81	7	1		70	N	
1	8/10/81	8	1		70	N	
1	8/10/81	9	1		70	N	
1	8/10/81	10	1		70	N	
1	8/10/81	11	1		70	N	
1	8/10/81	12	1		70	N	
1	1/19/82	2	1		75	Y	
1	1/19/82	3	1		75	N	
1	1/19/82	4	1		75	N	
1	1/19/82	5	1		75	N	
1	1/19/82	6	1		74	N	
1	1/19/82	7	1		72	N	
1	1/19/82	8	1		72	N	
1	1/19/82	9	1		72	N	
1	1/19/82	10	1		72	N	
1	1/19/82	11	1		72	N	
1	1/19/82	12	1		72	N	
1	1/19/82	13	1		69	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-107							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	1/19/82	14	1		62	N	
1	4/6/82	1	1		83	Y	
1	4/6/82	2	1		61	N	
1	4/6/82	3	1		61	N	
1	4/6/82	4	1		59	N	
1	4/6/82	5	1		57	N	
1	4/6/82	6	1		52	N	
1	4/6/82	7	1		52	N	
1	4/6/82	8	1		52	N	
1	4/6/82	9	1		52	N	
1	4/6/82	10	1		52	N	
1	4/6/82	11	1		52	N	
1	4/6/82	12	1		51	N	
1	4/6/82	13	1		48	N	
1	4/6/82	14	1		46	N	
1	7/13/82	1	1			N	
1	10/16/82	1	1		66	N	
1	10/16/82	2	1		67	N	
1	10/16/82	3	1		68	N	
1	10/16/82	4	1		68	N	
1	10/16/82	5	1		69	Y	
1	10/16/82	6	1		69	N	
1	10/16/82	7	1		68	N	
1	10/16/82	8	1		69	N	
1	10/16/82	9	1		69	N	
1	10/16/82	10	1		69	N	
1	10/16/82	11	1		69	N	
1	10/16/82	12	1		69	N	
1	4/3/83	1	1			N	O/S
1	10/13/83	1	1			N	O/S
1	11/12/91	1	1			N	O/S
1	1/2/92	1	1			N	O/S
1	7/2/92	1	1			N	O/S NO LABELED BOX
1	1/1/93	1	1			N	O/S
1	7/24/93	1	1			N	NO THERMOCOUPLE READINGS O/S
1	7/31/93	1	1			N	TC#1-12 O/S
300 Records selected.							

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-108							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	9/18/74	1	1	18	64.4	N	degree C/TWINS confirm
1	9/18/74	2	1	18	64.4	N	degree C/TWINS confirm
1	9/18/74	3	1	18	64.4	N	degree C/TWINS confirm
1	9/18/74	4	1	18	64.4	N	degree C/TWINS confirm
1	9/18/74	5	1	25	77	Y	degree C/TWINS confirm
1	9/18/74	6	1	17	62.6	N	degree C/TWINS confirm
1	9/18/74	7	1	17	62.6	N	degree C/TWINS confirm
1	9/18/74	8	1	17	62.6	N	degree C/TWINS confirm
1	9/18/74	9	1	17	62.6	N	degree C/TWINS confirm
1	9/18/74	10	1	17	62.6	N	degree C/TWINS confirm
1	9/18/74	11	1	17	62.6	N	degree C/TWINS confirm
1	9/18/74	12	1	17	62.6	N	degree C/TWINS confirm
1	12/11/74	1	1	22.2	71.96	N	degree C/TWINS confirm
1	12/11/74	2	1	22.2	71.96	N	degree C/TWINS confirm
1	12/11/74	3	1	22.2	71.96	N	degree C/TWINS confirm
1	12/11/74	4	1	22.2	71.96	N	degree C/TWINS confirm
1	12/11/74	6	1	21.11	69.998	N	degree C/TWINS confirm
1	12/11/74	7	1	23.89	75.002	Y	degree C/TWINS confirm
1	12/11/74	8	1	23.89	75.002	N	degree C/TWINS confirm
1	12/11/74	9	1	23.89	75.002	N	degree C/TWINS confirm
1	12/11/74	10	1	23.89	75.002	N	degree C/TWINS confirm
1	12/11/74	11	1	23.89	75.002	N	degree C/TWINS confirm
1	12/11/74	12	1	23.89	75.002	N	degree C/TWINS confirm
1	4/10/75	1	1	22	71.6	Y	degree C/TWINS confirm
1	4/10/75	2	1	22	71.6	N	degree C/TWINS confirm
1	4/10/75	3	1	22	71.6	N	degree C/TWINS confirm
1	4/10/75	4	1	22	71.6	N	degree C/TWINS confirm
1	4/10/75	6	1	22	71.6	N	degree C/TWINS confirm
1	4/10/75	7	1	22	71.6	N	degree C/TWINS confirm
1	4/10/75	8	1	22	71.6	N	degree C/TWINS confirm
1	4/10/75	9	1	22	71.6	N	degree C/TWINS confirm
1	4/10/75	10	1	22	71.6	N	degree C/TWINS confirm
1	4/10/75	11	1	22	71.6	N	degree C/TWINS confirm
1	4/10/75	12	1	22	71.6	N	degree C/TWINS confirm
1	7/25/75	1	1		74	Y	
1	7/25/75	2	1		73	N	
1	7/25/75	3	1		73	N	
1	7/25/75	4	1		73	N	
1	7/25/75	6	1		73	N	
1	7/25/75	7	1		73	N	
1	7/25/75	8	1		73	N	
1	7/25/75	9	1		73	N	
1	7/25/75	10	1		73	N	
1	7/25/75	11	1		73	N	
1	7/25/75	12	1		72	N	
1	2/10/76	1	1		71	Y	
1	2/10/76	2	1		70	N	
1	2/10/76	3	1		70	N	
1	2/10/76	4	1		70	N	
1	2/10/76	6	1		71	N	
1	2/10/76	7	1		70	N	
1	2/10/76	8	1		70	N	
1	2/10/76	9	1		70	N	
1	2/10/76	10	1		70	N	
1	2/10/76	11	1		70	N	
1	2/10/76	12	1		70	N	
1	4/5/76	1	1		61	Y	
1	4/5/76	2	1		61	N	
1	4/5/76	3	1		61	N	
1	4/5/76	4	1		60	N	
1	4/5/76	6	1		60	N	
1	4/5/76	7	1		60	N	
1	4/5/76	8	1		60	N	
1	4/5/76	9	1		60	N	
1	4/5/76	10	1		60	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-108							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	4/5/76	11	1		60	N	
1	4/5/76	12	1		59	N	
1	7/20/76	1	1		63	Y	
1	7/20/76	2	1		63	N	
1	7/20/76	3	1		63	N	
1	7/20/76	4	1		63	N	
1	7/20/76	5	1		63	N	
1	7/20/76	6	1		63	N	
1	7/20/76	7	1		63	N	
1	7/20/76	8	1		62	N	
1	7/20/76	9	1		62	N	
1	7/20/76	10	1		62	N	
1	7/20/76	11	1		62	N	
1	7/20/76	12	1		62	N	
1	1/11/77	1	1		54	Y	
1	1/11/77	2	1		54	N	
1	1/11/77	3	1		54	N	
1	1/11/77	4	1		54	N	
1	1/11/77	5	1		54	N	
1	1/11/77	6	1		54	N	
1	1/11/77	7	1		54	N	
1	1/11/77	8	1		54	N	
1	4/26/77	1	1		61	Y	
1	4/26/77	2	1		60	N	
1	4/26/77	3	1		60	N	
1	4/26/77	4	1		59	N	
1	4/26/77	6	1		60	N	
1	4/26/77	7	1		59	N	
1	4/26/77	8	1		59	N	
1	4/26/77	9	1		59	N	
1	4/26/77	10	1		59	N	
1	4/26/77	11	1		59	N	
1	4/26/77	12	1		58	N	
1	7/26/77	1	1		56	Y	
1	7/26/77	2	1		56	N	
1	7/26/77	3	1		56	N	
1	7/26/77	4	1		56	N	
1	7/26/77	6	1		56	N	
1	7/26/77	7	1		56	N	
1	7/26/77	8	1		56	N	
1	7/26/77	9	1		56	N	
1	7/26/77	10	1		56	N	
1	7/26/77	11	1		56	N	
1	7/26/77	12	1		56	N	
1	1/16/78	1	1		64	N	
1	1/16/78	2	1		64	N	
1	1/16/78	3	1		64	N	
1	1/16/78	4	1		64	N	
1	1/16/78	5	1		64	N	
1	1/16/78	6	1		64	N	
1	1/16/78	7	1		64	N	
1	1/16/78	8	1		64	N	
1	1/16/78	9	1		65	Y	
1	1/16/78	10	1		65	N	
1	1/16/78	11	1		65	N	
1	4/24/78	1	1		76	Y	
1	4/24/78	2	1		74	N	
1	4/24/78	3	1		74	N	
1	4/24/78	4	1		74	N	
1	4/24/78	5	1		74	N	
1	4/24/78	6	1		74	N	
1	4/24/78	7	1		74	N	
1	4/24/78	8	1		74	N	
1	4/24/78	9	1		74	N	
1	4/24/78	10	1		74	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-108							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	4/24/78	11	1		74	N	
1	4/24/78	12	1		74	N	
1	7/16/78	1	1		69	N	
1	7/16/78	2	1		70	Y	
1	7/16/78	3	1		68	N	
1	7/16/78	4	1		69	N	
1	7/16/78	5	1		68	N	
1	7/16/78	6	1		69	N	
1	7/16/78	7	1		69	N	
1	7/16/78	8	1		70	N	
1	7/16/78	9	1		68	N	
1	7/16/78	10	1		69	N	
1	7/16/78	11	1		68	N	
1	7/16/78	12	1		69	N	
1	8/10/78	1	1		73	Y	
1	8/10/78	2	1		73	N	
1	8/10/78	3	1		73	N	
1	8/10/78	4	1		73	N	
1	8/10/78	5	1		73	N	
1	8/10/78	6	1		73	N	
1	8/10/78	7	1		72	N	
1	8/10/78	8	1		72	N	
1	8/10/78	9	1		72	N	
1	8/10/78	10	1		72	N	
1	8/10/78	11	1		72	N	
1	8/10/78	12	1		72	N	
1	11/10/78	1	1		76	N	
1	11/10/78	2	1		77	Y	
1	11/10/78	3	1		75	N	
1	11/10/78	4	1		73	N	
1	11/10/78	5	1		71	N	
1	11/10/78	6	1		72	N	
1	11/10/78	7	1		72	N	
1	11/10/78	8	1		72	N	
1	11/10/78	9	1		72	N	
1	11/10/78	10	1		72	N	
1	11/10/78	11	1		73	N	
1	11/10/78	12	1		73	N	
1	1/5/79	1	1		69	Y	
1	1/5/79	2	1		69	N	
1	1/5/79	3	1		69	N	
1	1/5/79	4	1		69	N	
1	1/5/79	5	1		69	N	
1	1/5/79	6	1		69	N	
1	1/5/79	7	1		69	N	
1	1/5/79	8	1		69	N	
1	1/5/79	9	1		69	N	
1	1/5/79	10	1		69	N	
1	1/5/79	11	1		69	N	
1	4/7/79	1	1		65	Y	
1	4/7/79	2	1		63	N	
1	4/7/79	3	1		63	N	
1	4/7/79	4	1		63	N	
1	4/7/79	5	1		63	N	
1	4/7/79	6	1		63	N	
1	4/7/79	7	1		62	N	
1	4/7/79	8	1		62	N	
1	4/7/79	9	1		62	N	
1	4/7/79	10	1		62	N	
1	4/7/79	11	1		62	N	
1	4/7/79	12	1		62	N	
1	7/1/79	1	1		68	Y	
1	7/1/79	2	1		67	N	
1	7/1/79	3	1		67	N	
1	7/1/79	4	1		67	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-108							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	7/1/79	5	1		67	N	
1	7/1/79	6	1		67	N	
1	7/1/79	7	1		67	N	
1	7/1/79	8	1		67	N	
1	7/1/79	9	1		67	N	
1	7/1/79	10	1		67	N	
1	7/1/79	11	1		67	N	
1	7/1/79	12	1		67	N	
1	10/8/79	1	1		73	Y	
1	10/8/79	2	1		73	N	
1	10/8/79	3	1		73	N	
1	10/8/79	4	1		73	N	
1	10/8/79	5	1		73	N	
1	10/8/79	6	1		73	N	
1	10/8/79	7	1		73	N	
1	10/8/79	8	1		73	N	
1	10/8/79	9	1		73	N	
1	10/8/79	10	1		73	N	
1	10/8/79	11	1		73	N	
1	10/8/79	12	1		73	N	
1	1/9/80	1	1		90	Y	
1	1/9/80	2	1		89	N	
1	1/9/80	3	1		89	N	
1	1/9/80	4	1		89	N	
1	1/9/80	5	1		89	N	
1	1/9/80	6	1		89	N	
1	1/9/80	7	1		89	N	
1	1/9/80	8	1		89	N	
1	1/9/80	9	1		88	N	
1	1/9/80	10	1		88	N	
1	1/9/80	11	1		88	N	
1	1/9/80	12	1		88	N	
1	4/4/80	1	1		72	Y	
1	4/4/80	2	1		70	N	
1	4/4/80	3	1		70	N	
1	4/4/80	4	1		70	N	
1	4/4/80	5	1		70	N	
1	4/4/80	6	1		69	N	
1	4/4/80	7	1		69	N	
1	4/4/80	8	1		69	N	
1	4/4/80	9	1		69	N	
1	4/4/80	10	1		68	N	
1	4/4/80	11	1		68	N	
1	4/4/80	12	1		67	N	
1	7/5/80	1	1		65	Y	
1	7/5/80	2	1		65	N	
1	7/5/80	4	1		65	N	
1	7/5/80	5	1		65	N	
1	7/5/80	6	1		65	N	
1	7/5/80	7	1		65	N	
1	7/5/80	8	1		65	N	
1	7/5/80	9	1		65	N	
1	7/5/80	10	1		65	N	
1	7/5/80	11	1		65	N	
1	7/5/80	12	1		65	N	
1	10/26/80	1	1		76	N	
1	10/26/80	2	1		77	Y	
1	10/26/80	3	1		77	N	
1	10/26/80	4	1		77	N	
1	10/26/80	5	1		77	N	
1	10/26/80	6	1		77	N	
1	10/26/80	7	1		77	N	
1	10/26/80	8	1		77	N	
1	10/26/80	9	1		77	N	
1	10/26/80	10	1		77	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-108							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	10/26/80	11	1		77	N	
1	10/26/80	12	1		77	N	
1	1/10/81	1	1		77	N	
1	1/10/81	2	1		77	N	
1	1/10/81	3	1		77	N	
1	1/10/81	4	1		77	N	
1	1/10/81	5	1		77	N	
1	1/10/81	6	1		77	N	
1	1/10/81	7	1		77	N	
1	1/10/81	8	1		78	Y	
1	1/10/81	9	1		78	N	
1	1/10/81	10	1		78	N	
1	1/10/81	11	1		78	N	
1	1/10/81	12	1		78	N	
1	1/10/81	13	1		78	N	
1	1/10/81	14	1		78	N	
1	1/8/83	1	1			N	O/S
1	4/3/83	1	1			N	O/S
1	10/13/83	1	1			N	O/S
1	11/12/91	1	1			N	O/S
1	1/2/92	1	1			N	O/S
1	7/3/92	1	1		61.3	Y	J TI-041
1	7/3/92	2	1		61.3	N	
1	7/3/92	3	1		61	N	
1	7/3/92	4	1		61.2	N	
1	7/3/92	5	1		61.2	N	
1	7/3/92	6	1		61.2	N	
1	7/3/92	7	1		61.2	N	
1	7/3/92	8	1		61.1	N	
1	7/3/92	9	1		60.9	N	
1	7/3/92	10	1		60.8	N	
1	7/3/92	11	1		60.6	N	
1	7/3/92	12	1		60.3	N	
1	7/24/93	1	1		62.8	N	J 910126143-42
1	7/24/93	2	1		62.8	N	
1	7/24/93	3	1		62.7	N	
1	7/24/93	4	1		62.7	N	
1	7/24/93	5	1		62.8	N	
1	7/24/93	6	1		62.8	N	
1	7/24/93	7	1		62.8	N	
1	7/24/93	8	1		62.9	Y	
1	7/24/93	9	1		62.8	N	
1	7/24/93	10	1		62.7	N	
1	7/24/93	11	1		62.7	N	
1	7/24/93	12	1		62.6	N	
1	7/31/93	1	1		62.5	N	TI-039 J 910126143-50
1	7/31/93	2	1		62.6	N	
1	7/31/93	3	1		63.2	N	
1	7/31/93	4	1		62.6	N	
1	7/31/93	5	1		62.8	Y	
1	7/31/93	6	1		62.7	N	
1	7/31/93	7	1		62.8	N	
1	7/31/93	8	1		62.8	N	
1	7/31/93	9	1		62.7	N	
1	7/31/93	10	1		62.6	N	
1	7/31/93	11	1		62.6	N	
1	7/31/93	12	1		62.5	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-109							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	1/2/92	1	1			N	O/S
1	7/2/92	1	1			N	O/S
1	1/1/93	1	1			N	O/S NO RELAY BOX
1	7/23/93	1	1		74.9	N	J 817-13-55-001
1	7/23/93	2	1		76.1	N	
1	7/23/93	3	1		76.7	Y	
1	7/23/93	4	1		76.5	N	
1	7/23/93	5	1		75.6	N	
1	7/23/93	6	1		76.4	N	
1	7/23/93	7	1		76.4	N	
1	7/23/93	8	1		76.3	N	
1	7/23/93	9	1		75	N	
1	7/23/93	10	1		74	N	
1	7/23/93	11	1		74.8	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	10/24/71	1	1			Y	125 - suspect data
1	10/24/71	3	1			N	125 - suspect data
1	10/24/71	5	1			N	125 - suspect data
1	10/24/71	7	1			N	125 - suspect data
1	10/24/71	9	1			N	125 - suspect data
1	9/3/74	1	1	40	104	Y	degree C/TWINS confirm
1	9/3/74	2	1	37	98.6	N	degree C/TWINS confirm
1	9/3/74	3	1	38	100.4	N	degree C/TWINS confirm
1	9/3/74	4	1	38	100.4	N	degree C/TWINS confirm
1	9/3/74	5	1	38	100.4	N	degree C/TWINS confirm
1	9/3/74	6	1	35	95	N	degree C/TWINS confirm
1	9/3/74	7	1	35	95	N	degree C/TWINS confirm
1	9/3/74	8	1	34	93.2	N	degree C/TWINS confirm
1	9/3/74	9	1	35	95	N	degree C/TWINS confirm
1	9/3/74	10	1	35	95	N	degree C/TWINS confirm
1	9/3/74	11	1	35	95	N	degree C/TWINS confirm
1	9/3/74	12	1	36	96.8	N	degree C/TWINS confirm
1	9/18/74	1	1	21.11	69.998	N	degree C/TWINS confirm
1	9/18/74	2	1	21.11	69.998	N	degree C/TWINS confirm
1	9/18/74	3	1	21.67	71.006	N	degree C/TWINS confirm
1	9/18/74	4	1	21.67	71.006	N	degree C/TWINS confirm
1	9/18/74	5	1	21.67	71.006	N	degree C/TWINS confirm
1	9/18/74	6	1	21.67	71.006	N	degree C/TWINS confirm
1	9/18/74	7	1	23.33	73.994	Y	degree C/TWINS confirm
1	9/18/74	8	1	23.33	73.994	N	degree C/TWINS confirm
1	9/18/74	9	1	23.33	73.994	N	degree C/TWINS confirm
1	9/18/74	10	1	23.33	73.994	N	degree C/TWINS confirm
1	9/18/74	11	1	23.33	73.994	N	degree C/TWINS confirm
1	9/18/74	12	1	23.33	73.994	N	degree C/TWINS confirm
1	12/11/74	1	1	22.22	71.996	N	degree C/TWINS confirm
1	12/11/74	2	1	24.44	75.992	Y	degree C/TWINS confirm
1	12/11/74	3	1	24.44	75.992	N	degree C/TWINS confirm
1	12/11/74	4	1	24.44	75.992	N	degree C/TWINS confirm
1	12/11/74	5	1	24.44	75.992	N	degree C/TWINS confirm
1	12/11/74	6	1	24.44	75.992	N	degree C/TWINS confirm
1	12/11/74	7	1	24.44	75.992	N	degree C/TWINS confirm
1	12/11/74	8	1	24.44	75.992	N	degree C/TWINS confirm
1	12/11/74	9	1	24.44	75.992	N	degree C/TWINS confirm
1	12/11/74	10	1	24.44	75.992	N	degree C/TWINS confirm
1	12/11/74	11	1	24.44	75.992	N	degree C/TWINS confirm
1	12/11/74	12	1	24.44	75.992	N	degree C/TWINS confirm
1	4/10/75	1	1	22	71.6	Y	degree C/TWINS confirm
1	4/10/75	2	1	22	71.6	N	degree C/TWINS confirm
1	4/10/75	3	1	22	71.6	N	degree C/TWINS confirm
1	4/10/75	4	1	22	71.6	N	degree C/TWINS confirm
1	4/10/75	5	1	22	71.6	N	degree C/TWINS confirm
1	4/10/75	6	1	22	71.6	N	degree C/TWINS confirm
1	4/10/75	7	1	22	71.6	N	degree C/TWINS confirm
1	4/10/75	8	1	22	71.6	N	degree C/TWINS confirm
1	4/10/75	9	1	20	68	N	degree C/TWINS confirm
1	4/10/75	10	1	21	69.8	N	degree C/TWINS confirm
1	4/10/75	11	1	20	68	N	degree C/TWINS confirm
1	4/10/75	12	1	20	68	N	degree C/TWINS confirm
1	7/25/75	1	1		74	N	
1	7/25/75	2	1		74	N	
1	7/25/75	3	1		74	N	
1	7/25/75	4	1		75	Y	
1	7/25/75	5	1		75	N	
1	7/25/75	6	1		75	N	
1	7/25/75	7	1		75	N	
1	7/25/75	8	1		75	N	
1	7/25/75	9	1		74	N	
1	7/25/75	10	1		74	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	7/25/75	11	1		74	N	
1	7/25/75	12	1		74	N	
1	2/10/76	1	1		70	N	
1	2/10/76	2	1		71	Y	
1	2/10/76	3	1		70	N	
1	2/10/76	4	1		70	N	
1	2/10/76	5	1		70	N	
1	2/10/76	6	1		70	N	
1	2/10/76	7	1		70	N	
1	2/10/76	8	1		70	N	
1	2/10/76	9	1		69	N	
1	2/10/76	10	1		69	N	
1	2/10/76	11	1		69	N	
1	2/10/76	12	1		69	N	
1	4/5/76	1	1		65	Y	
1	4/5/76	3	1		66	N	
1	4/5/76	4	1		65	N	
1	4/5/76	5	1		65	N	
1	4/5/76	6	1		65	N	
1	4/5/76	7	1		65	N	
1	4/5/76	8	1		65	N	
1	4/5/76	9	1		63	N	
1	4/5/76	10	1		63	N	
1	4/5/76	11	1		63	N	
1	4/5/76	12	1		62	N	
1	7/20/76	1	1		63	Y	
1	7/20/76	2	1		63	N	
1	7/20/76	3	1		63	N	
1	7/20/76	4	1		63	N	
1	7/20/76	5	1		63	N	
1	7/20/76	6	1		63	N	
1	7/20/76	7	1		63	N	
1	7/20/76	8	1		62	N	
1	7/20/76	9	1		62	N	
1	7/20/76	10	1		62	N	
1	7/20/76	11	1		62	N	
1	7/20/76	12	1		62	N	
1	1/11/77	1	1		96	N	
1	1/11/77	2	1		98	N	
1	1/11/77	3	1		99	Y	
1	1/11/77	4	1		98	N	
1	1/11/77	5	1		98	N	
1	1/11/77	6	1		98	N	
1	1/11/77	7	1		98	N	
1	1/11/77	8	1		98	N	
1	1/11/77	9	1		97	N	
1	1/11/77	10	1		97	N	
1	1/11/77	11	1		97	N	
1	1/11/77	12	1		96	N	
1	5/29/77	1	1		74	N	
1	5/29/77	2	1		74	N	
1	5/29/77	3	1		75	N	
1	5/29/77	4	1		70	N	
1	5/29/77	5	1		77	Y	
1	5/29/77	6	1		76	N	
1	5/29/77	7	1		74	N	
1	5/29/77	8	1		74	N	
1	5/29/77	9	1		74	N	
1	5/29/77	10	1		74	N	
1	5/29/77	11	1		73	N	
1	5/29/77	12	1		72	N	
1	7/16/77	1	1		60	Y	
1	7/16/77	2	1		60	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	7/16/77	3	1		60	N	
1	7/16/77	4	1		60	N	
1	7/16/77	5	1		60	N	
1	7/16/77	6	1		60	N	
1	7/16/77	7	1		60	N	
1	7/16/77	8	1		60	N	
1	7/16/77	9	1		60	N	
1	7/16/77	10	1		60	N	
1	7/16/77	11	1		60	N	
1	7/16/77	12	1		60	N	
1	1/16/78	1	1		72	N	
1	1/16/78	2	1		73	Y	
1	1/16/78	3	1		72	N	
1	1/16/78	4	1		71	N	
1	1/16/78	5	1		70	N	
1	1/16/78	6	1		70	N	
1	1/16/78	7	1		70	N	
1	1/16/78	8	1		70	N	
1	1/16/78	9	1		71	N	
1	1/16/78	10	1		71	N	
1	1/16/78	11	1		71	N	
1	1/16/78	12	1		71	N	
1	4/24/78	1	1		83	N	
1	4/24/78	2	1		84	Y	
1	4/24/78	3	1		82	N	
1	4/24/78	4	1		75	N	
1	4/24/78	5	1		75	N	
1	4/24/78	6	1		75	N	
1	4/24/78	7	1		75	N	
1	4/24/78	8	1		75	N	
1	4/24/78	9	1		74	N	
1	4/24/78	11	1		73	N	
1	4/24/78	12	1		73	N	
1	7/16/78	1	1		66	N	
1	7/16/78	2	1		66	N	
1	7/16/78	3	1		66	N	
1	7/16/78	4	1		66	N	
1	7/16/78	5	1		66	N	
1	7/16/78	6	1		66	N	
1	7/16/78	7	1		66	N	
1	7/16/78	8	1		66	N	
1	7/16/78	9	1		67	N	
1	7/16/78	10	1		67	N	
1	7/16/78	11	1		67	N	
1	7/16/78	12	1		66	N	
1	11/12/78	1	1		77	N	
1	11/12/78	2	1		78	Y	
1	11/12/78	3	1		76	N	
1	11/12/78	4	1		74	N	
1	11/12/78	5	1		74	N	
1	11/12/78	6	1		74	N	
1	11/12/78	7	1		73	N	
1	11/12/78	8	1		73	N	
1	11/12/78	9	1		73	N	
1	11/12/78	10	1		74	N	
1	11/12/78	11	1		74	N	
1	11/12/78	12	1		73	N	
1	1/5/79	1	1		74	Y	
1	1/5/79	2	1		71	N	
1	1/5/79	3	1		73	N	
1	1/5/79	4	1		71	N	
1	1/5/79	5	1		71	N	
1	1/5/79	6	1		70	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	1/5/79	7	1		71	N	
1	1/5/79	8	1		71	N	
1	1/5/79	9	1		71	N	
1	1/5/79	10	1		71	N	
1	1/5/79	11	1		71	N	
1	1/5/79	12	1		71	N	
1	4/7/79	1	1		69	Y	
1	4/7/79	2	1		67	N	
1	4/7/79	3	1		65	N	
1	4/7/79	4	1		63	N	
1	4/7/79	5	1		61	N	
1	4/7/79	6	1		61	N	
1	4/7/79	7	1		61	N	
1	4/7/79	8	1		61	N	
1	4/7/79	9	1		60	N	
1	4/7/79	10	1		60	N	
1	4/7/79	11	1		60	N	
1	4/7/79	12	1		60	N	
1	7/1/79	1	1		68	Y	
1	7/1/79	2	1		67	N	
1	7/1/79	3	1		67	N	
1	7/1/79	4	1		66	N	
1	7/1/79	5	1		66	N	
1	7/1/79	6	1		66	N	
1	7/1/79	7	1		66	N	
1	7/1/79	8	1		66	N	
1	7/1/79	9	1		66	N	
1	7/1/79	10	1		66	N	
1	7/1/79	11	1		66	N	
1	7/1/79	12	1		66	N	
1	10/8/79	1	1		68	N	
1	10/8/79	2	1		68	N	
1	10/8/79	3	1		68	N	
1	10/8/79	4	1		69	N	
1	10/8/79	5	1		70	N	
1	10/8/79	6	1		70	N	
1	10/8/79	7	1		70	N	
1	10/8/79	8	1		70	N	
1	10/8/79	9	1		70	N	
1	10/8/79	10	1		70	N	
1	10/8/79	11	1		70	N	
1	10/8/79	12	1		71	Y	
1	1/9/80	1	1		91	Y	
1	1/9/80	2	1		90	N	
1	1/9/80	3	1		90	N	
1	1/9/80	4	1		88	N	
1	1/9/80	5	1		87	N	
1	1/9/80	6	1		87	N	
1	1/9/80	7	1		87	N	
1	1/9/80	8	1		87	N	
1	1/9/80	9	1		87	N	
1	1/9/80	10	1		87	N	
1	1/9/80	11	1		87	N	
1	1/9/80	12	1		87	N	
1	4/4/80	1	1		64	Y	
1	4/4/80	2	1		63	N	
1	4/4/80	3	1		60	N	
1	4/4/80	4	1		58	N	
1	4/4/80	5	1		57	N	
1	4/4/80	6	1		56	N	
1	4/4/80	7	1		56	N	
1	4/4/80	8	1		56	N	
1	4/4/80	9	1		56	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	4/4/80	10	1		56	N	
1	4/4/80	11	1		56	N	
1	4/4/80	12	1		55	N	
1	7/5/80	1	1		63	Y	
1	7/5/80	2	1		63	N	
1	7/5/80	3	1		63	N	
1	7/5/80	4	1		62	N	
1	7/5/80	5	1		62	N	
1	7/5/80	6	1		62	N	
1	7/5/80	7	1		62	N	
1	7/5/80	8	1		62	N	
1	7/5/80	9	1		62	N	
1	7/5/80	10	1		62	N	
1	7/5/80	11	1		62	N	
1	7/5/80	12	1		62	N	
1	10/26/80	1	1		73	N	
1	10/26/80	2	1		73	N	
1	10/26/80	3	1		74	N	
1	10/26/80	4	1		75	Y	
1	10/26/80	5	1		73	N	
1	10/26/80	6	1		75	N	
1	10/26/80	7	1		75	N	
1	10/26/80	8	1		75	N	
1	10/26/80	9	1		75	N	
1	10/26/80	10	1		75	N	
1	10/26/80	11	1		75	N	
1	10/26/80	12	1		75	N	
1	1/10/81	1	1		84	Y	
1	1/10/81	2	1		84	N	
1	1/10/81	3	1		83	N	
1	1/10/81	4	1		81	N	
1	1/10/81	5	1		81	N	
1	1/10/81	6	1		80	N	
1	1/10/81	7	1		80	N	
1	1/10/81	8	1		80	N	
1	1/10/81	9	1		80	N	
1	1/10/81	10	1		80	N	
1	1/10/81	11	1		80	N	
1	1/10/81	12	1		80	N	
1	8/10/81	1	1		66	Y	
1	8/10/81	2	1		66	N	
1	8/10/81	3	1		66	N	
1	8/10/81	4	1		66	N	
1	8/10/81	5	1		66	N	
1	8/10/81	6	1		66	N	
1	8/10/81	7	1		66	N	
1	8/10/81	8	1		66	N	
1	8/10/81	9	1		66	N	
1	8/10/81	10	1		66	N	
1	8/10/81	11	1		66	N	
1	8/10/81	12	1		66	N	
1	1/19/82	1	1		77	Y	
1	1/19/82	2	1		77	N	
1	1/19/82	3	1		76	N	
1	1/19/82	4	1		75	N	
1	1/19/82	5	1		74	N	
1	1/19/82	6	1		74	N	
1	1/19/82	7	1		74	N	
1	1/19/82	8	1		74	N	
1	1/19/82	9	1		74	N	
1	1/19/82	10	1		74	N	
1	1/19/82	11	1		74	N	
1	1/19/82	12	1		74	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	4/6/82	1	1		64	Y	
1	4/6/82	2	1		63	N	
1	4/6/82	3	1		62	N	
1	4/6/82	4	1		60	N	
1	4/6/82	6	1		59	N	
1	4/6/82	7	1		59	N	
1	4/6/82	8	1		59	N	
1	4/6/82	9	1		59	N	
1	4/6/82	10	1		59	N	
1	4/6/82	11	1		59	N	
1	4/6/82	12	1		58	N	
1	7/13/82	1	1		72	Y	
1	7/13/82	2	1		71	N	
1	7/13/82	3	1		71	N	
1	7/13/82	4	1		71	N	
1	7/13/82	5	1		71	N	
1	7/13/82	6	1		71	N	
1	7/13/82	7	1		71	N	
1	7/13/82	8	1		71	N	
1	10/16/82	1	1		66	N	
1	10/16/82	2	1		67	N	
1	10/16/82	3	1		68	N	
1	10/16/82	4	1		69	N	
1	10/16/82	5	1		69	N	
1	10/16/82	6	1		69	N	
1	10/16/82	7	1		69	N	
1	10/16/82	8	1		69	N	
1	10/16/82	9	1		69	N	
1	10/16/82	10	1		70	Y	
1	10/16/82	11	1		70	N	
1	10/16/82	12	1		70	N	
1	1/8/83	1	1		66	N	
1	1/8/83	2	1		67	N	
1	1/8/83	3	1		69	N	
1	1/8/83	4	1		69	N	
1	1/8/83	5	1		69	N	
1	1/8/83	6	1		68	N	
1	1/8/83	7	1		69	N	
1	1/8/83	8	1		69	N	
1	1/8/83	9	1		69	N	
1	1/8/83	10	1		70	Y	
1	1/8/83	11	1		70	N	
1	1/8/83	12	1		70	N	
1	4/3/83	1	1			N	O/S
1	1/29/89	1	1		71	Y	J-2E-OP-020
1	1/29/89	2	1		69	N	
1	1/29/89	3	1		69	N	
1	1/29/89	4	1		68	N	
1	1/29/89	5	1		68	N	
1	1/29/89	6	1		68	N	
1	1/29/89	7	1		67	N	
1	1/29/89	8	1		67	N	
1	1/29/89	9	1		67	N	
1	1/29/89	10	1		67	N	
1	1/29/89	11	1		67	N	
1	1/29/89	12	1		66	N	
1	10/23/89	1	1		67.4	N	
1	10/23/89	2	1		68.3	N	
1	10/23/89	3	1		69.1	N	
1	10/23/89	4	1		70	N	
1	10/23/89	5	1		70.1	N	
1	10/23/89	6	1		70	N	
1	10/23/89	7	1		69.9	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	10/23/89	8	1		69.9	N	
1	10/23/89	9	1		70	N	
1	10/23/89	10	1		70.1	N	
1	10/23/89	11	1		70.3	N	
1	10/23/89	12	1		70.6	Y	
1	11/4/89	1	1		63.3	N	
1	11/4/89	2	1		64	N	
1	11/4/89	3	1		64.6	N	
1	11/4/89	4	1		65.2	N	
1	11/4/89	5	1		65.2	N	
1	11/4/89	6	1		64.7	N	
1	11/4/89	7	1		65.3	N	
1	11/4/89	8	1		65.2	N	
1	11/4/89	9	1		65.2	N	
1	11/4/89	10	1		65.2	N	
1	11/4/89	11	1		65.3	N	
1	11/4/89	12	1		65.5	Y	
1	11/10/89	1	1		66.1	N	
1	11/10/89	2	1		66.9	N	
1	11/10/89	3	1		71.6	N	
1	11/10/89	4	1		68	N	
1	11/10/89	5	1		68	N	
1	11/10/89	6	1		68.1	N	
1	11/10/89	7	1		68.1	N	
1	11/10/89	8	1		68.1	N	
1	11/10/89	9	1		68.1	N	
1	11/10/89	10	1		68.1	N	
1	11/10/89	11	1		68.2	N	
1	11/10/89	12	1		68.4	Y	
1	11/18/89	3	1		70.5	Y	J
1	11/18/89	4	1		70.3	N	
1	11/18/89	5	1		70	N	
1	11/18/89	7	1		70	N	
1	11/18/89	8	1		70.3	N	
1	11/18/89	9	1		70.1	N	
1	11/18/89	10	1		69.9	N	
1	11/18/89	11	1		69.9	N	
1	11/18/89	12	1		70.1	N	
1	11/24/89	1	1		68.1	N	
1	11/24/89	2	1		68.8	N	
1	11/24/89	3	1		69.6	N	
1	11/24/89	4	1		69.4	N	
1	11/24/89	5	1		69.4	N	
1	11/24/89	6	1		69.4	N	
1	11/24/89	7	1		69.4	N	
1	11/24/89	8	1		69.4	N	
1	11/24/89	9	1		69.5	N	
1	11/24/89	10	1		69.5	N	
1	11/24/89	11	1		69.6	N	
1	11/24/89	12	1		69.8	Y	
1	12/1/89	1	1		68.7	N	
1	12/1/89	2	1		69.4	N	
1	12/1/89	3	1		67.8	N	
1	12/1/89	4	1		69.7	N	
1	12/1/89	5	1		69.7	N	
1	12/1/89	6	1		69.7	N	
1	12/1/89	7	1		69.8	Y	
1	12/1/89	8	1		69.7	N	
1	12/1/89	9	1		69.7	N	
1	12/1/89	10	1		69.7	N	
1	12/1/89	11	1		69.8	N	
1	12/1/89	12	1		69.8	N	
1	12/10/89	3	1		57.5	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	12/10/89	4	1		73.1	N	
1	12/10/89	5	1		69.1	N	
1	12/10/89	6	1		63.2	N	
1	12/10/89	7	1		69.7	N	
1	12/10/89	8	1		69.3	N	
1	12/10/89	9	1		69.3	N	
1	12/10/89	10	1		69.3	N	
1	12/10/89	11	1		69.2	N	
1	12/10/89	12	1		69.2	N	
1	12/15/89	1	1		69	N	J
1	12/15/89	2	1		69.5	Y	
1	12/15/89	3	1		69.2	N	
1	12/15/89	4	1		69.1	N	
1	12/15/89	5	1		68.9	N	
1	12/15/89	6	1		68.7	N	
1	12/15/89	7	1		68.6	N	
1	12/15/89	8	1		68.9	N	
1	12/15/89	9	1		68.5	N	
1	12/15/89	10	1		68.6	N	
1	12/15/89	11	1		68.8	N	
1	12/15/89	12	1		69	N	
1	12/23/89	1	1		69.4	N	
1	12/23/89	2	1		69.6	Y	
1	12/23/89	3	1		68.3	N	
1	12/23/89	4	1		68.5	N	
1	12/23/89	5	1		68.4	N	
1	12/23/89	6	1		68.3	N	
1	12/23/89	7	1		68.3	N	
1	12/23/89	8	1		68.3	N	
1	12/23/89	9	1		68.3	N	
1	12/23/89	10	1		68.2	N	
1	12/23/89	11	1		68.4	N	
1	12/23/89	12	1		68.3	N	
1	1/5/90	1	1		66	N	
1	1/5/90	2	1		66.1	N	
1	1/5/90	3	1		67.2	Y	
1	1/5/90	4	1		64.8	N	
1	1/5/90	5	1		64.6	N	
1	1/5/90	6	1		64.5	N	
1	1/5/90	7	1		64.5	N	
1	1/5/90	8	1		64.5	N	
1	1/5/90	9	1		64.5	N	
1	1/5/90	10	1		64.5	N	
1	1/5/90	11	1		64.5	N	
1	1/5/90	12	1		64.5	N	
1	1/13/90	1	1		66	Y	J-890523512-20
1	1/13/90	2	1		65.8	N	
1	1/13/90	3	1		65.9	N	
1	1/13/90	4	1		64.5	N	
1	1/13/90	5	1		64.2	N	
1	1/13/90	6	1		64.2	N	
1	1/13/90	7	1		64.2	N	
1	1/13/90	8	1		64.3	N	
1	1/13/90	9	1		64.3	N	
1	1/13/90	10	1		64.3	N	
1	1/13/90	11	1		64.2	N	
1	1/13/90	12	1		64.1	N	
1	1/19/90	1	1		65.7	Y	J
1	1/19/90	2	1		65.7	N	
1	1/19/90	3	1		63.9	N	
1	1/19/90	4	1		63.9	N	
1	1/19/90	5	1		63.7	N	
1	1/19/90	6	1		63.7	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	1/19/90	7	1		63.7	N	
1	1/19/90	8	1		63.7	N	
1	1/19/90	9	1		63.7	N	
1	1/19/90	10	1		63.7	N	
1	1/19/90	11	1		63.7	N	
1	1/19/90	12	1		63.5	N	
1	1/26/90	1	1		65.8	Y	J
1	1/26/90	2	1		65.7	N	
1	1/26/90	3	1		64.7	N	
1	1/26/90	4	1		63.7	N	
1	1/26/90	5	1		63.5	N	
1	1/26/90	6	1		63.5	N	
1	1/26/90	7	1		63.5	N	
1	1/26/90	8	1		63.5	N	
1	1/26/90	9	1		63.5	N	
1	1/26/90	10	1		63.4	N	
1	1/26/90	11	1		63.5	N	
1	1/26/90	12	1		63.3	N	
1	2/2/90	1	1		62.6	N	
1	2/2/90	2	1		67.5	Y	
1	2/2/90	3	1		66.8	N	
1	2/2/90	4	1		65.3	N	
1	2/2/90	5	1		64.9	N	
1	2/2/90	6	1		64.9	N	
1	2/2/90	7	1		64.8	N	
1	2/2/90	8	1		64.8	N	
1	2/2/90	9	1		64.8	N	
1	2/2/90	10	1		64.8	N	
1	2/2/90	11	1		64.8	N	
1	2/2/90	12	1		64.5	N	
1	2/5/90	1	1		66.9	Y	J-2E-OP-021
1	2/5/90	2	1		65.5	N	
1	2/5/90	3	1		64.1	N	
1	2/5/90	4	1		63.9	N	
1	2/5/90	5	1		63.1	N	
1	2/5/90	6	1		63.2	N	
1	2/5/90	7	1		63.1	N	
1	2/5/90	8	1		63	N	
1	2/5/90	9	1		63.1	N	
1	2/5/90	10	1		63.1	N	
1	2/5/90	11	1		63.1	N	
1	2/5/90	12	1		62.8	N	
1	2/11/90	1	1		65.9	N	J-2E-OP-021
1	2/11/90	2	1		65.6	N	
1	2/11/90	3	1		66.2	Y	
1	2/11/90	4	1		62.8	N	
1	2/11/90	5	1		62.6	N	
1	2/11/90	6	1		62.5	N	
1	2/11/90	7	1		62.4	N	
1	2/11/90	8	1		62.3	N	
1	2/11/90	9	1		62.2	N	
1	2/11/90	10	1		62.2	N	
1	2/11/90	11	1		62.1	N	
1	2/11/90	12	1		62	N	
1	3/2/90	1	1		66.3	N	J-2E-OP-020
1	3/2/90	2	1		65.9	N	
1	3/2/90	3	1		69.7	Y	
1	3/2/90	4	1		63	N	
1	3/2/90	5	1		62.4	N	
1	3/2/90	6	1		61.9	N	
1	3/2/90	7	1		61.4	N	
1	3/2/90	8	1		61.2	N	
1	3/2/90	9	1		61.1	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	3/2/90	10	1		61.1	N	
1	3/2/90	11	1		61.2	N	
1	3/2/90	12	1		61.2	N	
1	4/7/90	1	1		65	N	J-2E-OP-020
1	4/7/90	2	1		65	N	
1	4/7/90	3	1		71	Y	
1	4/7/90	4	1		62	N	
1	4/7/90	5	1		62	N	
1	4/7/90	6	1		62	N	
1	4/7/90	7	1		62	N	
1	4/7/90	8	1		62	N	
1	4/7/90	9	1		62	N	
1	4/7/90	10	1		62	N	
1	4/7/90	11	1		61	N	
1	4/7/90	12	1		61	N	
1	5/5/90	1	1		64	N	
1	5/5/90	2	1		63	N	
1	5/5/90	3	1		68	Y	
1	5/5/90	4	1		61	N	
1	5/5/90	5	1		61	N	
1	5/5/90	6	1		61	N	
1	5/5/90	7	1		60	N	
1	5/5/90	8	1		60	N	
1	5/5/90	9	1		60	N	
1	5/5/90	10	1		60	N	
1	5/5/90	11	1		60	N	
1	5/5/90	12	1		60	N	
1	6/1/90	1	1		65	N	
1	6/1/90	2	1		64.6	N	
1	6/1/90	3	1		66.5	Y	
1	6/1/90	4	1		63.2	N	
1	6/1/90	5	1		63.1	N	
1	6/1/90	6	1		63	N	
1	6/1/90	7	1		62.8	N	
1	6/1/90	8	1		62.8	N	
1	6/1/90	9	1		62.7	N	
1	6/1/90	10	1		62.8	N	
1	6/1/90	11	1		62.9	N	
1	6/1/90	12	1		62.8	N	
1	7/8/90	1	1		64.8	N	J-2E-OP-020
1	7/8/90	2	1		64.6	N	
1	7/8/90	3	1		67.6	Y	
1	7/8/90	4	1		64.3	N	
1	7/8/90	5	1		63.7	N	
1	7/8/90	6	1		63.7	N	
1	7/8/90	7	1		63.6	N	
1	7/8/90	8	1		63.6	N	
1	7/8/90	9	1		63.7	N	
1	7/8/90	10	1		63.4	N	
1	7/8/90	11	1		64.1	N	
1	7/8/90	12	1		64.3	N	
1	8/3/90	1	1		60.2	N	J
1	8/3/90	2	1		60.5	N	
1	8/3/90	3	1		69	Y	
1	8/3/90	4	1		61.7	N	
1	8/3/90	5	1		61.7	N	
1	8/3/90	6	1		61.2	N	
1	8/3/90	7	1		60.6	N	
1	8/3/90	8	1		60.9	N	
1	8/3/90	9	1		61.2	N	
1	8/3/90	10	1		61.2	N	
1	8/3/90	11	1		61.2	N	
1	8/3/90	12	1		61.6	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	9/10/90	1	1		66.6	N	
1	9/10/90	4	1		68.7	N	
1	9/10/90	5	1		68.8	N	
1	9/10/90	6	1		68.7	N	
1	9/10/90	7	1		68.7	N	
1	9/10/90	8	1		68.3	N	
1	9/10/90	9	1		68.7	N	
1	9/10/90	10	1		68.9	N	
1	9/10/90	11	1		71.6	Y	
1	9/10/90	12	1		69.4	N	
1	10/9/90	1	1		65	N	J
1	10/9/90	2	1		66	N	
1	10/9/90	3	1		69	Y	
1	10/9/90	4	1		68	N	
1	10/9/90	5	1		68	N	
1	10/9/90	6	1		67	N	
1	10/9/90	7	1		67	N	
1	10/9/90	8	1		67	N	
1	10/9/90	9	1		68	N	
1	10/9/90	10	1		68	N	
1	10/9/90	11	1		68	N	
1	10/9/90	12	1		69	N	
1	10/22/90	1	1		65.5	N	J 890523512-20
1	10/22/90	2	1		66.7	N	
1	10/22/90	3	1		68.6	N	
1	10/22/90	4	1		68.7	N	
1	10/22/90	5	1		68.9	N	
1	10/22/90	6	1		69	N	
1	10/22/90	7	1		69.1	N	
1	10/22/90	8	1		69.1	N	
1	10/22/90	9	1		69.2	N	
1	10/22/90	10	1		69.2	N	
1	10/22/90	11	1		69.3	N	
1	10/22/90	12	1		69.5	Y	
1	10/26/90	1	1		59.7	N	J-890523512-20
1	10/26/90	2	1		60.5	N	
1	10/26/90	3	1		66.3	N	
1	10/26/90	4	1		62.3	N	
1	10/26/90	5	1		62	N	
1	10/26/90	6	1		61.9	N	
1	10/26/90	7	1		61.8	N	
1	10/26/90	8	1		61.8	N	
1	10/26/90	9	1		62	N	
1	10/26/90	10	1		62.3	N	
1	10/26/90	11	1		62.7	N	
1	10/26/90	12	1		63.3	N	
1	10/29/90	1	1		64.8	N	J-890523512-20
1	10/29/90	2	1		65.7	N	
1	10/29/90	3	1		69.3	Y	
1	10/29/90	4	1		67.5	N	
1	10/29/90	5	1		67.6	N	
1	10/29/90	6	1		67.6	N	
1	10/29/90	7	1		67.7	N	
1	10/29/90	8	1		67.7	N	
1	10/29/90	9	1		67.8	N	
1	10/29/90	10	1		67.9	N	
1	10/29/90	11	1		68	N	
1	10/29/90	12	1		68.3	N	
1	11/5/90	1	1		65.6	N	J 890523512-20
1	11/5/90	2	1		66.9	N	
1	11/5/90	3	1		69.1	N	
1	11/5/90	4	1		67.9	N	
1	11/5/90	5	1		68	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	11/5/90	6	1		67.9	N	
1	11/5/90	7	1		67.9	N	
1	11/5/90	8	1		67.9	N	
1	11/5/90	9	1		68	N	
1	11/5/90	10	1		68	N	
1	11/5/90	11	1		68.2	N	
1	11/5/90	12	1		68.4	Y	
1	11/12/90	1	1		64.5	N	2E-OP-021
1	11/12/90	2	1		65.3	N	
1	11/12/90	3	1		66.9	Y	
1	11/12/90	4	1		66.4	N	
1	11/12/90	5	1		66.5	N	
1	11/12/90	6	1		66.6	N	
1	11/12/90	7	1		66.6	N	
1	11/12/90	8	1		66.6	N	
1	11/12/90	9	1		66.6	N	
1	11/12/90	10	1		66.6	N	
1	11/12/90	11	1		66.6	N	
1	11/12/90	12	1		66.8	N	
1	11/18/90	1	1		64.2	N	J-HH-99A-J 890523512-20
1	11/18/90	2	1		65.1	N	
1	11/18/90	3	1		64.9	N	
1	11/18/90	4	1		66.1	N	
1	11/18/90	5	1		66.2	N	
1	11/18/90	6	1		66.2	N	
1	11/18/90	7	1		66.2	N	
1	11/18/90	8	1		66.3	N	
1	11/18/90	9	1		66.3	N	
1	11/18/90	10	1		66.3	N	
1	11/18/90	11	1		66.4	N	
1	11/18/90	12	1		66.6	Y	
1	11/25/90	1	1		65.8	N	J-2E-OP-021
1	11/25/90	2	1		65.9	N	
1	11/25/90	3	1		68.5	Y	
1	11/25/90	4	1		66.4	N	
1	11/25/90	5	1		66.4	N	
1	11/25/90	6	1		66.3	N	
1	11/25/90	7	1		66.2	N	
1	11/25/90	8	1		66.2	N	
1	11/25/90	9	1		66.2	N	
1	11/25/90	10	1		66	N	
1	11/25/90	11	1		66	N	
1	11/25/90	12	1		66.4	N	
1	12/5/90	1	1		64.7	N	J 890523512-20
1	12/5/90	2	1		64.3	N	
1	12/5/90	3	1		64	N	
1	12/5/90	4	1		65.6	N	
1	12/5/90	5	1		65.5	N	
1	12/5/90	6	1		65.5	N	
1	12/5/90	7	1		65.5	N	
1	12/5/90	8	1		65.5	N	
1	12/5/90	9	1		65.5	N	
1	12/5/90	10	1		65.5	N	
1	12/5/90	11	1		65.6	N	
1	12/5/90	12	1		65.9	Y	
1	12/11/90	1	1		64.9	N	J 890423320-11
1	12/11/90	2	1		65.9	Y	
1	12/11/90	3	1		63.6	N	
1	12/11/90	4	1		65.9	N	
1	12/11/90	5	1		65.7	N	
1	12/11/90	6	1		65.7	N	
1	12/11/90	7	1		65.8	N	
1	12/11/90	8	1		65.3	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	12/15/90	1	1		62.2	N	HH-99A-J
1	12/15/90	2	1		63.3	Y	
1	12/15/90	3	1		62.5	N	
1	12/15/90	4	1		63.1	N	
1	12/15/90	5	1		63.2	N	
1	12/15/90	6	1		63.3	N	
1	12/15/90	7	1		63.3	N	
1	12/15/90	8	1		63.3	N	
1	12/15/90	9	1		63.2	N	
1	12/15/90	10	1		63.1	N	
1	12/15/90	11	1		63	N	
1	12/15/90	12	1		62.9	N	
1	12/31/90	1	1		66.5	N	J-2E-OP-021
1	12/31/90	2	1		66.9	Y	
1	12/31/90	3	1		63.4	N	
1	12/31/90	4	1		66	N	
1	12/31/90	5	1		65.9	N	
1	12/31/90	6	1		65.9	N	
1	12/31/90	7	1		65.9	N	
1	12/31/90	8	1		65.9	N	
1	12/31/90	9	1		65.8	N	
1	12/31/90	10	1		65.7	N	
1	12/31/90	11	1		65.7	N	
1	12/31/90	12	1		65.7	N	
1	1/6/91	1	1		66	Y	J
1	1/6/91	2	1		66	N	
1	1/6/91	3	1		64	N	
1	1/6/91	4	1		65	N	
1	1/6/91	5	1		65	N	
1	1/6/91	6	1		65	N	
1	1/6/91	7	1		65	N	
1	1/6/91	8	1		65	N	
1	1/6/91	9	1		65	N	
1	1/6/91	10	1		65	N	
1	1/6/91	11	1		65	N	
1	1/6/91	12	1		65	N	
1	1/13/91	1	1		65.2	N	J 890423320-11
1	1/13/91	2	1		65.5	Y	
1	1/13/91	3	1		64.1	N	
1	1/13/91	4	1		63.8	N	
1	1/13/91	5	1		63.7	N	
1	1/13/91	6	1		63.8	N	
1	1/13/91	7	1		63.9	N	
1	1/13/91	8	1		63.9	N	
1	1/13/91	9	1		63.9	N	
1	1/13/91	10	1		63.8	N	
1	1/13/91	11	1		63.7	N	
1	1/13/91	12	1		63.6	N	
1	1/19/91	1	1		67	N	J HH99A-J
1	1/19/91	2	1		67.2	Y	
1	1/19/91	4	1		65.2	N	
1	1/19/91	5	1		65.1	N	
1	1/19/91	6	1		65.2	N	
1	1/19/91	7	1		65.2	N	
1	1/19/91	8	1		65.2	N	
1	1/19/91	9	1		65.1	N	
1	1/19/91	10	1		65.1	N	
1	1/19/91	11	1		65	N	
1	1/19/91	12	1		64.8	N	
1	1/29/91	1	1		64.8	N	J HH-99A 890523512-20
1	1/29/91	2	1		64.9	Y	
1	1/29/91	3	1		60.4	N	
1	1/29/91	4	1		62.2	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	1/29/91	5	1		62.2	N	
1	1/29/91	6	1		62.2	N	
1	1/29/91	7	1		62.2	N	
1	1/29/91	8	1		62.1	N	
1	1/29/91	9	1		62	N	
1	1/29/91	10	1		62	N	
1	1/29/91	11	1		61.8	N	
1	1/29/91	12	1		61.8	N	
1	2/3/91	1	1		63	Y	J Ser# 890523512-47
1	2/3/91	2	1		63	N	
1	2/3/91	3	1		60	N	
1	2/3/91	4	1		60	N	
1	2/3/91	5	1		60	N	
1	2/3/91	6	1		60	N	
1	2/3/91	7	1		60	N	
1	2/3/91	8	1		60	N	
1	2/3/91	9	1		60	N	
1	2/3/91	10	1		60	N	
1	2/3/91	11	1		60	N	
1	2/3/91	12	1		60	N	
1	2/9/91	1	1		64.7	N	J-890523512-47
1	2/9/91	2	1		64.5	N	
1	2/9/91	3	1		67.1	N	
1	2/9/91	4	1		61.1	N	
1	2/9/91	5	1		61.5	N	
1	2/9/91	6	1		61.5	N	
1	2/9/91	7	1		61.5	N	
1	2/9/91	8	1		61.6	N	
1	2/9/91	9	1		61.5	N	
1	2/9/91	10	1		61.4	N	
1	2/9/91	11	1		61.3	N	
1	2/9/91	12	1		60.8	N	
1	2/16/91	1	1		64	N	
1	2/16/91	2	1		63.4	N	
1	2/16/91	3	1		62	N	
1	2/16/91	4	1		60.5	N	
1	2/16/91	5	1		60.2	N	
1	2/16/91	6	1		60.2	N	
1	2/16/91	7	1		60.1	N	
1	2/16/91	8	1		60.1	N	
1	2/16/91	9	1		60.1	N	
1	2/16/91	10	1		60	N	
1	2/16/91	11	1		60	N	
1	2/16/91	12	1		59.7	N	
1	2/23/91	1	1		61.7	Y	J 890523512-47
1	2/23/91	2	1		61.4	N	
1	2/23/91	3	1		59.5	N	
1	2/23/91	4	1		58.3	N	
1	2/23/91	5	1		58.1	N	
1	2/23/91	6	1		58.2	N	
1	2/23/91	7	1		58.2	N	
1	2/23/91	8	1		58.2	N	
1	2/23/91	9	1		58.1	N	
1	2/23/91	10	1		58.1	N	
1	2/23/91	11	1		58	N	
1	2/23/91	12	1		57.6	N	
1	3/3/91	1	1		62.1	Y	J 890523512-47
1	3/3/91	2	1		62.7	N	
1	3/3/91	3	1		58	N	
1	3/3/91	4	1		58.6	N	
1	3/3/91	5	1		58.4	N	
1	3/3/91	6	1		58.4	N	
1	3/3/91	7	1		58.4	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	3/3/91	8	1		58.4	N	
1	3/3/91	9	1		58.3	N	
1	3/3/91	10	1		58.2	N	
1	3/3/91	11	1		58.2	N	
1	3/3/91	12	1		57.9	N	
1	3/9/91	1	1		66.4	Y	2D-OP-020
1	3/9/91	2	1		65.9	N	
1	3/9/91	3	1		61.6	N	
1	3/9/91	4	1		62.7	N	
1	3/9/91	5	1		62.5	N	
1	3/9/91	6	1		62.6	N	
1	3/9/91	7	1		62.6	N	
1	3/9/91	8	1		62.6	N	
1	3/9/91	9	1		62.5	N	
1	3/9/91	10	1		62.4	N	
1	3/9/91	11	1		62.3	N	
1	3/9/91	12	1		61.8	N	
1	3/17/91	1	1		64.7	Y	J 2E-OP-021
1	3/17/91	2	1		64.2	N	
1	3/17/91	3	1		63.8	N	
1	3/17/91	4	1		60.8	N	
1	3/17/91	5	1		60.6	N	
1	3/17/91	6	1		60.6	N	
1	3/17/91	7	1		60.4	N	
1	3/17/91	8	1		60.2	N	
1	3/17/91	9	1		60	N	
1	3/17/91	10	1		59.8	N	
1	3/17/91	11	1		59.6	N	
1	3/17/91	12	1		59.1	N	
1	3/23/91	1	1		64.7	Y	J 2E-OP-021
1	3/23/91	2	1		64.1	N	
1	3/23/91	3	1		62.3	N	
1	3/23/91	4	1		61	N	
1	3/23/91	5	1		60.8	N	
1	3/23/91	6	1		60.8	N	
1	3/23/91	7	1		60.8	N	
1	3/23/91	8	1		60.8	N	
1	3/23/91	9	1		60.7	N	
1	3/23/91	10	1		60.7	N	
1	3/23/91	11	1		60.5	N	
1	3/23/91	12	1		60	N	
1	3/30/91	1	1		63.6	N	J 890523512-20
1	3/30/91	2	1		63.1	N	
1	3/30/91	3	1		67.9	Y	
1	3/30/91	4	1		59.9	N	
1	3/30/91	5	1		59.7	N	
1	3/30/91	6	1		59.7	N	
1	3/30/91	7	1		59.5	N	
1	3/30/91	8	1		59.4	N	
1	3/30/91	9	1		59.2	N	
1	3/30/91	10	1		59	N	
1	3/30/91	11	1		58.7	N	
1	3/30/91	12	1		58.1	N	
1	4/7/91	1	1		65.1	Y	J 890423320-11
1	4/7/91	2	1		64.5	N	
1	4/7/91	3	1		63.7	N	
1	4/7/91	4	1		61.8	N	
1	4/7/91	5	1		61.7	N	
1	4/7/91	6	1		61.7	N	
1	4/7/91	7	1		61.7	N	
1	4/7/91	8	1		61.7	N	
1	4/7/91	9	1		61.6	N	
1	4/7/91	10	1		61.5	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	4/7/91	11	1		61.4	N	
1	4/7/91	12	1		60.9	N	
1	4/14/91	1	1		64.1	N	J 890523512-20
1	4/14/91	2	1		63.4	N	
1	4/14/91	3	1		64.8	Y	
1	4/14/91	4	1		60.6	N	
1	4/14/91	5	1		60.5	N	
1	4/14/91	6	1		60.6	N	
1	4/14/91	7	1		60.6	N	
1	4/14/91	8	1		60.6	N	
1	4/14/91	9	1		60.5	N	
1	4/14/91	10	1		60.5	N	
1	4/14/91	11	1		60.3	N	
1	4/14/91	12	1		59.9	N	
1	4/20/91	1	1		62.5	N	J 890523512-20
1	4/20/91	2	1		62.2	N	
1	4/20/91	3	1		66	Y	
1	4/20/91	4	1		59.7	N	
1	4/20/91	5	1		59.6	N	
1	4/20/91	6	1		59.6	N	
1	4/20/91	7	1		59.5	N	
1	4/20/91	8	1		59.4	N	
1	4/20/91	9	1		59.1	N	
1	4/20/91	10	1		58.9	N	
1	4/20/91	11	1		58.9	N	
1	4/20/91	12	1		58.4	N	
1	4/28/91	1	1		63.8	Y	J 890523512-20
1	4/28/91	2	1		63.2	N	
1	4/28/91	3	1		66.7	N	
1	4/28/91	4	1		60.6	N	
1	4/28/91	5	1		60.5	N	
1	4/28/91	6	1		60.5	N	
1	4/28/91	7	1		60.5	N	
1	4/28/91	8	1		60.6	N	
1	4/28/91	9	1		60.5	N	
1	4/28/91	10	1		60.4	N	
1	4/28/91	11	1		60.3	N	
1	4/28/91	12	1		59.9	N	
1	5/5/91	1	1		63.4	N	J 890523512-20
1	5/5/91	2	1		62.8	N	
1	5/5/91	3	1		66.2	Y	
1	5/5/91	4	1		60.4	N	
1	5/5/91	5	1		60.4	N	
1	5/5/91	6	1		60.4	N	
1	5/5/91	7	1		60.4	N	
1	5/5/91	8	1		60.3	N	
1	5/5/91	9	1		60.2	N	
1	5/5/91	10	1		60.1	N	
1	5/5/91	11	1		60	N	
1	5/5/91	12	1		59.6	N	
1	5/12/91	1	1		63.2	N	J
1	5/12/91	2	1		62.6	N	
1	5/12/91	3	1		65.8	Y	
1	5/12/91	4	1		60.5	N	
1	5/12/91	5	1		60.3	N	
1	5/12/91	6	1		60.3	N	
1	5/12/91	7	1		60.2	N	
1	5/12/91	8	1		60.1	N	
1	5/12/91	9	1		59.9	N	
1	5/12/91	10	1		59.8	N	
1	5/12/91	11	1		59.6	N	
1	5/12/91	12	1		59.2	N	
1	5/18/91	1	1		64.2	N	J Keithley 872 2E-OP-020

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	5/18/91	2	1		63.6	N	
1	5/18/91	3	1		67.1	Y	
1	5/18/91	4	1		61.6	N	
1	5/18/91	5	1		61.6	N	
1	5/18/91	6	1		61.6	N	
1	5/18/91	7	1		61.6	N	
1	5/18/91	8	1		61.6	N	
1	5/18/91	9	1		61.6	N	
1	5/18/91	10	1		61.5	N	
1	5/18/91	11	1		61.3	N	
1	5/18/91	12	1		60.9	N	
1	5/25/91	1	1		63.8	N	J 2E-OP-021
1	5/25/91	2	1		63.3	N	
1	5/25/91	3	1		67.1	Y	
1	5/25/91	4	1		61.6	N	
1	5/25/91	5	1		61.5	N	
1	5/25/91	6	1		61.4	N	
1	5/25/91	7	1		61.3	N	
1	5/25/91	8	1		61.2	N	
1	5/25/91	9	1		61.1	N	
1	5/25/91	10	1		61	N	
1	5/25/91	11	1		60.9	N	
1	5/25/91	12	1		60.5	N	
1	6/1/91	1	1		62	N	J 890423320-42
1	6/1/91	2	1		61.6	N	
1	6/1/91	3	1		68.5	Y	
1	6/1/91	4	1		59.9	N	
1	6/1/91	5	1		59.9	N	
1	6/1/91	6	1		59.9	N	
1	6/1/91	7	1		59.9	N	
1	6/1/91	8	1		59.9	N	
1	6/1/91	9	1		59.9	N	
1	6/1/91	10	1		59.9	N	
1	6/1/91	11	1		59.6	N	
1	6/1/91	12	1		59.3	N	
1	6/8/91	1	1		61.8	N	J 890523512-20
1	6/8/91	2	1		61.4	N	
1	6/8/91	3	1		69.2	Y	
1	6/8/91	4	1		59.9	N	
1	6/8/91	5	1		59.9	N	
1	6/8/91	6	1		59.9	N	
1	6/8/91	7	1		59.8	N	
1	6/8/91	8	1		59.7	N	
1	6/8/91	9	1		59.6	N	
1	6/8/91	10	1		59.5	N	
1	6/8/91	11	1		59.5	N	
1	6/8/91	12	1		58.8	N	
1	6/15/91	1	1		63.1	Y	J 2E-OP-021 TC#3 Bad data
1	6/15/91	2	1		62.8	N	
1	6/15/91	4	1		61.7	N	
1	6/15/91	5	1		61.9	N	
1	6/15/91	6	1		61.9	N	
1	6/15/91	7	1		61.8	N	
1	6/15/91	8	1		61.7	N	
1	6/15/91	9	1		61.6	N	
1	6/15/91	10	1		61.5	N	
1	6/15/91	11	1		61.2	N	
1	6/15/91	12	1		60.9	N	
1	6/23/91	1	1		63.5	N	J 2E-OP-021
1	6/23/91	2	1		63.2	N	
1	6/23/91	3	1		65.5	Y	
1	6/23/91	4	1		62.4	N	
1	6/23/91	5	1		62.5	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	6/23/91	6	1		62.6	N	
1	6/23/91	7	1		62.6	N	
1	6/23/91	8	1		62.5	N	
1	6/23/91	9	1		62.4	N	
1	6/23/91	10	1		62.3	N	
1	6/23/91	11	1		62.1	N	
1	6/23/91	12	1		61.8	N	
1	6/29/91	1	1		62	N	J 890423320-42
1	6/29/91	2	1		61.8	N	
1	6/29/91	3	1		63.4	Y	
1	6/29/91	4	1		61.3	N	
1	6/29/91	5	1		61.3	N	
1	6/29/91	6	1		61.3	N	
1	6/29/91	7	1		61.3	N	
1	6/29/91	8	1		61.3	N	
1	6/29/91	9	1		61.2	N	
1	6/29/91	10	1		61.2	N	
1	6/29/91	11	1		61.1	N	
1	6/29/91	12	1		60.8	N	
1	7/6/91	1	1		62.2	N	J 910126143-42
1	7/6/91	2	1		62.1	N	
1	7/6/91	3	1		64.6	Y	
1	7/6/91	4	1		61.7	N	
1	7/6/91	5	1		61.7	N	
1	7/6/91	6	1		61.7	N	
1	7/6/91	7	1		61.7	N	
1	7/6/91	8	1		61.6	N	
1	7/6/91	9	1		61.5	N	
1	7/6/91	10	1		61.4	N	
1	7/6/91	11	1		61.3	N	
1	7/6/91	12	1		61.1	N	
1	7/13/91	1	1		62.2	N	J 910126143-42
1	7/13/91	2	1		62.1	N	
1	7/13/91	3	1		64.6	Y	
1	7/13/91	4	1		61.7	N	
1	7/13/91	5	1		61.6	N	
1	7/13/91	6	1		61.6	N	
1	7/13/91	7	1		61.7	N	
1	7/13/91	8	1		61.6	N	
1	7/13/91	9	1		61.5	N	
1	7/13/91	10	1		61.3	N	
1	7/13/91	11	1		61.3	N	
1	7/13/91	12	1		61.2	N	
1	7/20/91	1	1		60.5	N	J 910126143-64
1	7/20/91	2	1		60.7	N	
1	7/20/91	3	1		65.4	N	
1	7/20/91	4	1		60.7	N	
1	7/20/91	5	1		60.8	N	
1	7/20/91	6	1		60.9	Y	
1	7/20/91	7	1		60.9	N	
1	7/20/91	8	1		60.9	N	
1	7/20/91	9	1		60.8	N	
1	7/20/91	10	1		60.7	N	
1	7/20/91	11	1		60.8	N	
1	7/20/91	12	1		60.4	N	
1	7/27/91	1	1		62	N	J 910126143-14
1	7/27/91	2	1		61.9	N	
1	7/27/91	3	1		65.8	Y	
1	7/27/91	4	1		62.2	N	
1	7/27/91	5	1		62.3	N	
1	7/27/91	6	1		62.3	N	
1	7/27/91	7	1		62.4	N	
1	7/27/91	8	1		62.3	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110 THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	7/27/91	9	1		62.2	N	
1	7/27/91	10	1		62.2	N	
1	7/27/91	11	1		62.1	N	
1	7/31/91	1	1		62.2	N	
1	7/31/91	2	1		62.1	N	
1	7/31/91	3	1		64.6	Y	
1	7/31/91	4	1		61.7	N	
1	7/31/91	5	1		61.6	N	
1	7/31/91	6	1		61.6	N	
1	7/31/91	7	1		61.7	N	
1	7/31/91	8	1		61.6	N	
1	7/31/91	9	1		61.5	N	
1	7/31/91	10	1		61.3	N	
1	7/31/91	11	1		61.3	N	
1	7/31/91	12	1		61.2	N	
1	8/3/91	1	1		61.5	N	J 910126143-14
1	8/3/91	2	1		61.6	N	
1	8/3/91	3	1		65.2	Y	
1	8/3/91	4	1		62.2	N	
1	8/3/91	5	1		62.4	N	
1	8/3/91	6	1		62.5	N	
1	8/3/91	7	1		62.5	N	
1	8/3/91	8	1		62.5	N	
1	8/3/91	9	1		62.3	N	
1	8/3/91	10	1		62.3	N	
1	8/3/91	11	1		62.2	N	
1	8/3/91	12	1		62.1	N	
1	8/10/91	1	1		63	Y	J 890523512-20
1	8/10/91	2	1		63	N	
1	8/10/91	3	1		63	N	
1	8/10/91	4	1		63	N	
1	8/10/91	5	1		63	N	
1	8/10/91	6	1		63	N	
1	8/10/91	7	1		63	N	
1	8/10/91	8	1		63	N	
1	8/10/91	9	1		63	N	
1	8/10/91	10	1		63	N	
1	8/10/91	11	1		63	N	
1	8/10/91	12	1		63	N	
1	8/18/91	1	1		62.5	N	J 890523512-20
1	8/18/91	2	1		62.8	N	
1	8/18/91	3	1		66.5	Y	
1	8/18/91	4	1		64.2	N	
1	8/18/91	5	1		64.4	N	
1	8/18/91	6	1		64.5	N	
1	8/18/91	7	1		64.6	N	
1	8/18/91	8	1		64.6	N	
1	8/18/91	9	1		64.4	N	
1	8/18/91	10	1		64.4	N	
1	8/18/91	11	1		64.3	N	
1	8/18/91	12	1		64.1	N	
1	8/24/91	1	1		63.3	N	J 890523512-2
1	8/24/91	2	1		63.7	N	
1	8/24/91	3	1		64	N	
1	8/24/91	4	1		65.3	N	
1	8/24/91	5	1		65.4	N	
1	8/24/91	6	1		65.6	N	
1	8/24/91	7	1		65.8	Y	
1	8/24/91	8	1		65.6	N	
1	8/24/91	9	1		65.6	N	
1	8/24/91	10	1		65.6	N	
1	8/24/91	11	1		65.6	N	
1	8/24/91	12	1		65.5	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	8/31/91	1	1		62.5	N	J-890423320-42
1	8/31/91	2	1		63	N	
1	8/31/91	3	1		66.5	Y	
1	8/31/91	4	1		64.8	N	
1	8/31/91	5	1		65.1	N	
1	8/31/91	6	1		65.2	N	
1	8/31/91	7	1		65.3	N	
1	8/31/91	8	1		65.3	N	
1	8/31/91	9	1		65.2	N	
1	8/31/91	10	1		65.3	N	
1	8/31/91	11	1		65.2	N	
1	8/31/91	12	1		64.9	N	
1	9/8/91	1	1		66	N	J-890423320-42
1	9/8/91	2	1		66.7	N	
1	9/8/91	3	1		70.6	Y	
1	9/8/91	4	1		68.4	N	
1	9/8/91	5	1		68.5	N	
1	9/8/91	6	1		68.6	N	
1	9/8/91	7	1		68.6	N	
1	9/8/91	8	1		68.9	N	
1	9/8/91	9	1		69.1	N	
1	9/8/91	10	1		69.1	N	
1	9/8/91	11	1		69.3	N	
1	9/8/91	12	1		69.7	N	
1	9/8/91	13	1		70	N	
1	9/15/91	1	1		63.2	N	J-910126143-75
1	9/15/91	2	1		63.9	N	
1	9/15/91	3	1		65.1	N	
1	9/15/91	4	1		66	N	
1	9/15/91	5	1		66.2	N	
1	9/15/91	6	1		66.3	Y	
1	9/15/91	7	1		66.3	N	
1	9/15/91	8	1		66.2	N	
1	9/15/91	9	1		66	N	
1	9/15/91	10	1		65.9	N	
1	9/15/91	11	1		65.7	N	
1	9/15/91	12	1		65.7	N	
1	9/21/91	1	1		62.8	N	J-910126143-75
1	9/21/91	2	1		63.8	N	
1	9/21/91	3	1		65.6	N	
1	9/21/91	4	1		65.8	N	
1	9/21/91	5	1		66	N	
1	9/21/91	6	1		66.2	Y	
1	9/21/91	7	1		66.2	N	
1	9/21/91	8	1		66.2	N	
1	9/21/91	9	1		66	N	
1	9/21/91	10	1		65.9	N	
1	9/21/91	11	1		65.8	N	
1	9/21/91	12	1		65.8	N	
1	9/28/91	1	1		63.9	N	J-KEITHLEY 872 #T1-059
1	9/28/91	2	1		64.8	N	
1	9/28/91	3	1		65.6	N	
1	9/28/91	4	1		66.9	N	
1	9/28/91	5	1		67.2	N	
1	9/28/91	6	1		67.4	N	
1	9/28/91	7	1		67.5	N	
1	9/28/91	8	1		67.6	N	
1	9/28/91	9	1		67.6	N	
1	9/28/91	10	1		67.6	N	
1	9/28/91	11	1		67.7	N	
1	9/28/91	12	1		67.8	Y	
1	10/5/91	1	1		64	N	J-910126143-42
1	10/5/91	2	1		64.9	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	10/5/91	3	1		65.6	N	
1	10/5/91	4	1		67	N	
1	10/5/91	5	1		67.3	N	
1	10/5/91	6	1		67.5	N	
1	10/5/91	7	1		67.5	N	
1	10/5/91	8	1		67.5	N	
1	10/5/91	9	1		67.5	N	
1	10/5/91	10	1		67.5	N	
1	10/5/91	11	1		67.6	N	
1	10/5/91	12	1		67.8	Y	
1	10/12/91	1	1		63.2	N	J-T1023
1	10/12/91	2	1		64.2	N	
1	10/12/91	3	1		65	N	
1	10/12/91	4	1		66.2	N	
1	10/12/91	5	1		66.4	N	
1	10/12/91	6	1		66.6	N	
1	10/12/91	7	1		66.6	N	
1	10/12/91	8	1		66.6	N	
1	10/12/91	9	1		66.7	N	
1	10/12/91	10	1		66.7	N	
1	10/12/91	11	1		66.8	N	
1	10/12/91	12	1		67	Y	
1	10/19/91	1	1		63.5	N	J-890523512-47
1	10/19/91	2	1		64.6	N	
1	10/19/91	3	1		70	Y	
1	10/19/91	4	1		66.5	N	
1	10/19/91	5	1		66.8	N	
1	10/19/91	6	1		66.9	N	
1	10/19/91	7	1		67	N	
1	10/19/91	8	1		67.1	N	
1	10/19/91	9	1		67	N	
1	10/19/91	10	1		66.9	N	
1	10/19/91	11	1		66.9	N	
1	10/19/91	12	1		67	N	
1	10/27/91	1	1		65.4	N	J-9101126143-42 TC #7,8,9,10 O/S
1	10/27/91	2	1		66.2	N	
1	10/27/91	3	1		64.2	N	
1	10/27/91	4	1		68.1	N	
1	10/27/91	5	1		68.3	N	
1	10/27/91	6	1		68.3	N	
1	10/27/91	7	1		68.3	N	
1	10/27/91	8	1		68.3	N	
1	10/27/91	9	1		68.3	N	
1	10/27/91	10	1		68.3	N	
1	10/27/91	11	1		68.5	N	
1	10/27/91	12	1		68.7	Y	
1	11/2/91	1	1		64	N	J-890523512-47
1	11/2/91	2	1		65	N	
1	11/2/91	3	1		68	Y	
1	11/2/91	4	1		66	N	
1	11/2/91	5	1		66	N	
1	11/2/91	6	1		66	N	
1	11/2/91	7	1		66	N	
1	11/2/91	8	1		66	N	
1	11/2/91	9	1		65	N	
1	11/2/91	10	1		65	N	
1	11/2/91	11	1		66	N	
1	11/2/91	12	1		66	N	
1	11/9/91	1	1		63	N	J-890523512-47
1	11/9/91	2	1		65	N	
1	11/9/91	3	1		69	Y	
1	11/9/91	4	1		66	N	
1	11/9/91	5	1		66	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	11/9/91	6	1		66	N	
1	11/9/91	7	1		66	N	
1	11/9/91	8	1		66	N	
1	11/9/91	9	1		66	N	
1	11/9/91	10	1		66	N	
1	11/9/91	11	1		66	N	
1	11/9/91	12	1		66	N	
1	11/17/91	1	1		64.3	N	J-910126143-75
1	11/17/91	2	1		65.2	N	
1	11/17/91	3	1		67.6	Y	
1	11/17/91	4	1		66.2	N	
1	11/17/91	5	1		66.3	N	
1	11/17/91	6	1		66.4	N	
1	11/17/91	7	1		66.4	N	
1	11/17/91	8	1		66.4	N	
1	11/17/91	9	1		66.4	N	
1	11/17/91	10	1		66.3	N	
1	11/17/91	11	1		66.2	N	
1	11/17/91	12	1		66.4	N	
1	11/24/91	1	1		64.8	N	J-910126143-75 TC #2 BAD DATA
1	11/24/91	3	1		67.9	Y	
1	11/24/91	4	1		66.3	N	
1	11/24/91	5	1		66.3	N	
1	11/24/91	6	1		66.3	N	
1	11/24/91	7	1		66.3	N	
1	11/24/91	8	1		66.3	N	
1	11/24/91	9	1		66.4	N	
1	11/24/91	10	1		66.4	N	
1	11/24/91	11	1		66.4	N	
1	11/24/91	12	1		66.6	N	
1	12/1/91	1	1		65	N	J-910126143-14
1	12/1/91	2	1		65.7	N	
1	12/1/91	3	1		66.7	Y	
1	12/1/91	4	1		66	N	
1	12/1/91	5	1		66	N	
1	12/1/91	6	1		66	N	
1	12/1/91	7	1		66.1	N	
1	12/1/91	8	1		66.1	N	
1	12/1/91	9	1		66.2	N	
1	12/1/91	10	1		66.1	N	
1	12/1/91	11	1		66.1	N	
1	12/1/91	12	1		66.1	N	
1	12/6/91	1	1		65.9	N	J-910126143-29
1	12/6/91	2	1		66.6	N	
1	12/6/91	3	1		67.6	Y	
1	12/6/91	4	1		66.7	N	
1	12/6/91	5	1		66.6	N	
1	12/6/91	6	1		66.6	N	
1	12/6/91	7	1		66.7	N	
1	12/6/91	8	1		66.7	N	
1	12/6/91	9	1		66.6	N	
1	12/6/91	10	1		66.6	N	
1	12/6/91	11	1		66.7	N	
1	12/6/91	12	1		66.7	N	
1	12/14/91	1	1		66	N	J-910126143-29
1	12/14/91	2	1		66.6	N	
1	12/14/91	3	1		66.8	Y	
1	12/14/91	4	1		66.4	N	
1	12/14/91	5	1		66.3	N	
1	12/14/91	6	1		66.4	N	
1	12/14/91	7	1		66.5	N	
1	12/14/91	8	1		66.5	N	
1	12/14/91	9	1		66.5	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	12/14/91	10	1		66.4	N	
1	12/14/91	11	1		66.4	N	
1	12/14/91	12	1		66.3	N	
1	12/20/91	1	1		66.6	N	J-910126143-29
1	12/20/91	2	1		67.2	Y	
1	12/20/91	3	1		65.4	N	
1	12/20/91	4	1		66.5	N	
1	12/20/91	5	1		66.4	N	
1	12/20/91	6	1		66.4	N	
1	12/20/91	7	1		66.4	N	
1	12/20/91	8	1		66.3	N	
1	12/20/91	9	1		66.3	N	
1	12/20/91	10	1		66.3	N	
1	12/20/91	11	1		66.2	N	
1	12/20/91	12	1		66.2	N	
1	12/29/91	1	1		66	N	J-910126143-29
1	12/29/91	2	1		66.4	Y	
1	12/29/91	3	1		64.6	N	
1	12/29/91	4	1		65.4	N	
1	12/29/91	5	1		65.3	N	
1	12/29/91	6	1		65.3	N	
1	12/29/91	7	1		65.4	N	
1	12/29/91	8	1		65.4	N	
1	12/29/91	9	1		65.4	N	
1	12/29/91	10	1		65.3	N	
1	12/29/91	11	1		65.3	N	
1	12/29/91	12	1		65.1	N	
1	1/4/92	1	1		65.5	N	J-910126143-50
1	1/4/92	2	1		65.7	Y	
1	1/4/92	3	1		65.5	N	
1	1/4/92	4	1		64.5	N	
1	1/4/92	5	1		64.4	N	
1	1/4/92	6	1		64.4	N	
1	1/4/92	7	1		64.2	N	
1	1/4/92	8	1		64.2	N	
1	1/4/92	9	1		64.3	N	
1	1/4/92	10	1		64.3	N	
1	1/4/92	11	1		64.1	N	
1	1/4/92	12	1		64	N	
1	1/11/92	1	1		64.8	N	
1	1/11/92	2	1		64.9	Y	
1	1/11/92	3	1		64	N	
1	1/11/92	4	1		63.4	N	
1	1/11/92	5	1		63.3	N	
1	1/11/92	6	1		63.3	N	
1	1/11/92	7	1		63.3	N	
1	1/11/92	8	1		63.4	N	
1	1/11/92	9	1		63.4	N	
1	1/11/92	10	1		63.3	N	
1	1/11/92	11	1		63.2	N	
1	1/11/92	12	1		63	N	
1	1/16/92	1	1		59.4	N	J 910126143-32
1	1/16/92	2	1		59.3	N	
1	1/16/92	3	1		59.3	N	
1	1/16/92	4	1		64.3	Y	
1	1/16/92	5	1		64.2	N	
1	1/16/92	6	1		64.2	N	
1	1/16/92	7	1		64.2	N	
1	1/16/92	8	1		64.2	N	
1	1/16/92	9	1		64.2	N	
1	1/16/92	10	1		64.2	N	
1	1/16/92	11	1		64.1	N	
1	1/16/92	12	1		63.9	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	1/25/92	1	1		64.2	N	J-910126143-14
1	1/25/92	2	1		64.2	N	
1	1/25/92	3	1		65.4	Y	
1	1/25/92	4	1		62.2	N	
1	1/25/92	5	1		62.1	N	
1	1/25/92	6	1		62.1	N	
1	1/28/92	1	1			N	ACCESS RESTRICTED 1/28 - 2/22 DUE TO BATTERY FUME INCIDENT
1	2/24/92	1	1		65.2	N	J-900925741-79
1	2/24/92	2	1		65	N	
1	2/24/92	3	1		68	N	
1	2/24/92	4	1		62.4	N	
1	2/24/92	5	1		62.2	N	
1	2/24/92	6	1		62.2	N	
1	2/24/92	7	1		62	N	
1	2/24/92	8	1		61.9	N	
1	2/24/92	9	1		61.7	N	
1	2/24/92	10	1		61.3	N	
1	2/24/92	11	1		61	N	
1	2/24/92	12	1		60.5	N	
1	2/29/92	1	1		65.1	Y	J+I-038/9101261H332
1	2/29/92	2	1		64.7	N	
1	2/29/92	3	1		64.6	N	
1	2/29/92	4	1		62.1	N	
1	2/29/92	5	1		62	N	
1	2/29/92	6	1		62	N	
1	2/29/92	7	1		61.9	N	
1	2/29/92	8	1		61.8	N	
1	2/29/92	9	1		61.8	N	
1	2/29/92	10	1		61.9	N	
1	2/29/92	11	1		61.8	N	
1	2/29/92	12	1		61.3	N	
1	3/8/92	1	1		64	N	J 910126143-48
1	3/8/92	2	1		63.4	N	
1	3/8/92	3	1		64.4	Y	
1	3/8/92	4	1		60.6	N	
1	3/8/92	5	1		60.5	N	
1	3/8/92	6	1		60.6	N	
1	3/8/92	7	1		60.6	N	
1	3/8/92	8	1		60.6	N	
1	3/8/92	9	1		60.5	N	
1	3/8/92	10	1		60.5	N	
1	3/8/92	11	1		60.4	N	
1	3/8/92	12	1		60	N	
1	3/14/92	1	1		64.1	N	J 910126143-32
1	3/14/92	2	1		63.8	N	
1	3/14/92	3	1		69.4	Y	
1	3/14/92	4	1		61.1	N	
1	3/14/92	5	1		60.7	N	
1	3/14/92	6	1		60.7	N	
1	3/14/92	7	1		60.7	N	
1	3/14/92	8	1		60.7	N	
1	3/14/92	9	1		60.2	N	
1	3/14/92	10	1		60	N	
1	3/14/92	11	1		59.9	N	
1	3/14/92	12	1		59.5	N	
1	3/20/92	1	1		63.7	N	
1	3/20/92	2	1		63.2	N	j 91012614332
1	3/20/92	3	1		67.6	Y	
1	3/20/92	4	1		60.1	N	
1	3/20/92	5	1		59.9	N	
1	3/20/92	6	1		59.7	N	
1	3/20/92	7	1		59.7	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	3/20/92	8	1		59.7	N	
1	3/20/92	9	1		59.7	N	
1	3/20/92	10	1		59.2	N	
1	3/20/92	11	1		59.9	N	
1	3/20/92	12	1		58.5	N	
1	3/28/92	1	1		64.1	N	910126143-66
1	3/28/92	2	1		63.6	N	
1	3/28/92	3	1		64.5	Y	
1	3/28/92	4	1		61	N	
1	3/28/92	5	1		60.9	N	
1	3/28/92	6	1		60.9	N	
1	3/28/92	7	1		60.9	N	
1	3/28/92	8	1		60.8	N	
1	3/28/92	9	1		60.7	N	
1	3/28/92	10	1		60.7	N	
1	3/28/92	11	1		60.5	N	
1	3/28/92	12	1		60.1	N	
1	4/3/92	1	1		62.6	N	J 910126143-14
1	4/3/92	2	1		61.9	N	
1	4/3/92	3	1		69.3	Y	
1	4/3/92	4	1		59.5	N	
1	4/3/92	5	1		59.4	N	
1	4/3/92	6	1		59.3	N	
1	4/3/92	7	1		59.2	N	
1	4/3/92	8	1		59.1	N	
1	4/3/92	9	1		58.9	N	
1	4/3/92	10	1		58.8	N	
1	4/3/92	11	1		58.8	N	
1	4/3/92	12	1		58.4	N	
1	4/11/92	1	1		63.8	N	J 910126143-64
1	4/11/92	2	1		63.3	N	
1	4/11/92	3	1		65.2	Y	
1	4/11/92	4	1		61	N	
1	4/11/92	5	1		60.8	N	
1	4/11/92	6	1		60.8	N	
1	4/11/92	7	1		60.8	N	
1	4/11/92	8	1		60.8	N	
1	4/11/92	9	1		60.7	N	
1	4/11/92	10	1		60.6	N	
1	4/11/92	11	1		60.5	N	
1	4/11/92	12	1		60.1	N	
1	4/17/92	1	1		63.7	N	
1	4/17/92	2	1		63.2	N	
1	4/17/92	3	1		65.1	Y	
1	4/17/92	4	1		61	N	
1	4/17/92	5	1		60.8	N	
1	4/17/92	6	1		60.8	N	
1	4/17/92	7	1		60.8	N	
1	4/17/92	8	1		60.7	N	
1	4/17/92	9	1		60.7	N	
1	4/17/92	10	1		60.6	N	
1	4/17/92	11	1		60.5	N	
1	4/17/92	12	1		60.1	N	
1	4/25/92	1	1		63.8	N	J 89052351220
1	4/25/92	2	1		63.3	N	
1	4/25/92	3	1		67.6	Y	
1	4/25/92	4	1		61.3	N	
1	4/25/92	5	1		61.2	N	
1	4/25/92	6	1		61.2	N	
1	4/25/92	7	1		61.2	N	
1	4/25/92	8	1		61.2	N	
1	4/25/92	9	1		61	N	
1	4/25/92	10	1		60.8	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	4/25/92	11	1		60.6	N	
1	4/25/92	12	1		60.1	N	
1	4/30/92	1	1		61.3	N	J 890523512-47
1	4/30/92	2	1		60.7	N	
1	4/30/92	3	1		65.8	Y	
1	4/30/92	4	1		58.7	N	
1	4/30/92	5	1		58.5	N	
1	4/30/92	6	1		58.4	N	
1	4/30/92	7	1		58.3	N	
1	4/30/92	8	1		58.3	N	
1	4/30/92	9	1		58.2	N	
1	4/30/92	10	1		58.2	N	
1	4/30/92	11	1		58.2	N	
1	4/30/92	12	1		57.9	N	
1	5/8/92	1	1		62.9	N	J 910126143-48
1	5/8/92	2	1		62.4	N	
1	5/8/92	3	1		68.2	Y	
1	5/8/92	4	1		60.6	N	
1	5/8/92	5	1		60.4	N	
1	5/8/92	6	1		60.4	N	
1	5/8/92	7	1		60.3	N	
1	5/8/92	8	1		60.3	N	
1	5/8/92	9	1		60.2	N	
1	5/8/92	10	1		60.3	N	
1	5/8/92	11	1		60.2	N	
1	5/8/92	12	1		59.9	N	
1	5/16/92	1	1		62.3	N	J 910126143-32
1	5/16/92	2	1		62	N	
1	5/16/92	3	1		71.2	Y	
1	5/16/92	4	1		60.3	N	
1	5/16/92	5	1		60.3	N	
1	5/16/92	6	1		60.2	N	
1	5/16/92	7	1		60.3	N	
1	5/16/92	8	1		60.3	N	
1	5/16/92	9	1		60.2	N	
1	5/16/92	10	1		60.2	N	
1	5/16/92	11	1		60.1	N	
1	5/16/92	12	1		59.7	N	
1	5/24/92	1	1		61.4	N	J 890523512-47 TC #3 BAD DATA
1	5/24/92	2	1		61	N	
1	5/24/92	4	1		59.6	N	
1	5/24/92	5	1		59.7	N	
1	5/24/92	6	1		59.7	N	
1	5/24/92	7	1		59.7	N	
1	5/24/92	8	1		59.6	N	
1	5/24/92	9	1		59.5	N	
1	5/24/92	10	1		59.4	N	
1	5/24/92	11	1		59.2	N	
1	5/24/92	12	1		58.8	N	
1	5/28/92	1	1		60.5	Y	J 890523512-47 TC #3 BAD DATA
1	5/28/92	2	1		60.2	N	
1	5/28/92	4	1		59.2	N	
1	5/28/92	5	1		59.2	N	
1	5/28/92	6	1		59.2	N	
1	5/28/92	7	1		59.2	N	
1	5/28/92	8	1		59.1	N	
1	5/28/92	9	1		59	N	
1	5/28/92	10	1		58.8	N	
1	5/28/92	11	1		58.8	N	
1	5/28/92	12	1		58.4	N	
1	6/5/92	1	1		61.1	N	J 910126143-50 TC #3 BAD DATA
1	6/5/92	2	1		61.2	Y	
1	6/5/92	4	1		60	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	6/5/92	5	1		60.1	N	
1	6/5/92	6	1		60.1	N	
1	6/5/92	7	1		59.9	N	
1	6/5/92	8	1		59.9	N	
1	6/5/92	9	1		59.8	N	
1	6/5/92	10	1		59.8	N	
1	6/5/92	11	1		59.7	N	
1	6/5/92	12	1		59.4	N	
1	6/13/92	1	1		59.4	N	J 890523512-47
1	6/13/92	2	1		59.2	N	
1	6/13/92	3	1		60.3	Y	
1	6/13/92	4	1		58.8	N	
1	6/13/92	5	1		58.8	N	
1	6/13/92	6	1		58.9	N	
1	6/13/92	7	1		58.8	N	
1	6/13/92	8	1		58.8	N	
1	6/13/92	9	1		58.7	N	
1	6/13/92	10	1		58.6	N	
1	6/13/92	11	1		58.5	N	
1	6/13/92	12	1		58.2	N	
1	6/20/92	1	1		61.7	Y	J 910126143-48
1	6/20/92	2	1		61.7	N	
1	6/20/92	4	1		61.5	N	
1	6/20/92	5	1		61.7	N	
1	6/20/92	6	1		61.6	N	
1	6/20/92	7	1		61.8	N	
1	6/20/92	8	1		61.8	N	
1	6/20/92	9	1		61.6	N	
1	6/20/92	10	1		61.7	N	
1	6/20/92	11	1		61.5	N	
1	6/20/92	12	1		61.2	N	
1	6/28/92	1	1		62.3	N	J TI-042 910126143-66
1	6/28/92	2	1		62.3	N	
1	6/28/92	4	1		62.5	N	
1	6/28/92	5	1		62.6	N	
1	6/28/92	6	1		62.6	N	
1	6/28/92	7	1		62.7	Y	
1	6/28/92	8	1		62.5	N	
1	6/28/92	9	1		62.5	N	
1	6/28/92	10	1		62.5	N	
1	6/28/92	11	1		62.5	N	
1	6/28/92	12	1		62.3	N	
1	7/3/92	1	1		60.5	N	J TI-041
1	7/3/92	2	1		60.6	N	
1	7/3/92	4	1		60.8	N	
1	7/3/92	5	1		61.1	N	
1	7/3/92	6	1		61.2	N	
1	7/3/92	7	1		61.2	Y	
1	7/3/92	8	1		61.1	N	
1	7/3/92	9	1		61	N	
1	7/3/92	10	1		60.9	N	
1	7/3/92	11	1		60.8	N	
1	7/3/92	12	1		60.6	N	
1	7/10/92	1	1		62	N	J 910126143-42
1	7/10/92	2	1		62.2	N	
1	7/10/92	4	1		62.9	N	
1	7/10/92	5	1		63.1	N	
1	7/10/92	6	1		63.2	Y	
1	7/10/92	7	1		63.2	N	
1	7/10/92	8	1		63.2	N	
1	7/10/92	9	1		63.2	N	
1	7/10/92	10	1		63.1	N	
1	7/10/92	11	1		63	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	7/10/92	12	1		62.9	N	
1	7/18/92	1	1		60.3	N	J 910126143-42 #3 BAD DATA
1	7/18/92	2	1		60.5	N	
1	7/18/92	4	1		61.8	N	
1	7/18/92	5	1		60.5	N	
1	7/18/92	6	1		61	N	
1	7/18/92	7	1		62.6	N	
1	7/18/92	8	1		62.6	N	
1	7/18/92	9	1		62	N	
1	7/18/92	10	1		62.6	Y	
1	7/18/92	11	1		62.4	N	
1	7/18/92	12	1		62.3	N	
1	7/24/92	1	1		62.3	N	J HH-99A 910126143-29 #3 BAD
1	7/24/92	2	1		62.6	N	
1	7/24/92	4	1		63.8	N	
1	7/24/92	5	1		64.1	N	
1	7/24/92	6	1		64.2	Y	
1	7/24/92	7	1		64.2	N	
1	7/24/92	8	1		64.1	N	
1	7/24/92	9	1		64.1	N	
1	7/24/92	10	1		63.9	N	
1	7/24/92	11	1		63.6	N	
1	7/24/92	12	1		63.3	N	
1	8/1/92	1	1		62	N	J TI-041
1	8/1/92	2	1		62.3	N	
1	8/1/92	4	1		63.9	Y	
1	8/1/92	5	1		64.2	N	
1	8/1/92	6	1		64.3	N	
1	8/1/92	7	1		64.4	N	
1	8/1/92	8	1		64.4	N	
1	8/1/92	9	1		64.3	N	
1	8/1/92	10	1		64.4	N	
1	8/1/92	11	1		64.3	N	
1	8/1/92	12	1		64.2	N	
1	8/7/92	1	1		62	N	J 890423320-42
1	8/7/92	2	1		62.4	N	
1	8/7/92	4	1		64	N	
1	8/7/92	5	1		64.2	N	
1	8/7/92	6	1		64.2	N	
1	8/7/92	7	1		64.2	N	
1	8/7/92	8	1		64.2	N	
1	8/7/92	9	1		64.2	N	
1	8/7/92	10	1		64.3	N	
1	8/7/92	11	1		64.3	N	
1	8/7/92	12	1		64.4	Y	
1	8/15/92	1	1		62	N	J 890423320 TC#3 BAD
1	8/15/92	2	1		62	N	
1	8/15/92	4	1		64	Y	
1	8/15/92	5	1		64	N	
1	8/15/92	6	1		64	N	
1	8/15/92	7	1		64	N	
1	8/15/92	8	1		64	N	
1	8/15/92	9	1		64	N	
1	8/15/92	10	1		64	N	
1	8/15/92	11	1		64	N	
1	8/15/92	12	1		64	N	
1	8/21/92	1	1		61.7	N	J 890423320-42 TC#3 BAD
1	8/21/92	2	1		62.4	N	
1	8/21/92	4	1		64.5	N	
1	8/21/92	5	1		64.8	N	
1	8/21/92	6	1		64.9	N	
1	8/21/92	7	1		64.9	N	
1	8/21/92	8	1		64.9	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110						
THERMOCOUPLE DATA						
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP
1	8/21/92	9	1		64.9	N
1	8/21/92	10	1		64.9	N
1	8/21/92	11	1		65	Y
1	8/30/92	1	1		61.7	N
1	8/30/92	2	1		62.5	N
1	8/30/92	4	1		64.7	N
1	8/30/92	5	1		65	N
1	8/30/92	6	1		65.2	N
1	8/30/92	7	1		65.3	N
1	8/30/92	8	1		65.4	N
1	8/30/92	9	1		65.3	N
1	8/30/92	10	1		65.4	N
1	8/30/92	11	1		65.4	N
1	8/30/92	12	1		65.5	Y
1	9/6/92	1	1		62.4	N
1	9/6/92	2	1		63.4	N
1	9/6/92	4	1		65.5	N
1	9/6/92	5	1		65.7	N
1	9/6/92	6	1		65.8	Y
1	9/6/92	7	1		65.7	N
1	9/6/92	8	1		65.6	N
1	9/6/92	9	1		65.6	N
1	9/6/92	10	1		65.5	N
1	9/6/92	11	1		65.4	N
1	9/6/92	12	1		65.5	N
1	9/12/92	1	1		62.8	N
1	9/12/92	2	1		63.9	N
1	9/12/92	4	1		66.2	N
1	9/12/92	5	1		66.5	N
1	9/12/92	6	1		66.7	N
1	9/12/92	7	1		66.8	N
1	9/12/92	8	1		66.9	N
1	9/12/92	9	1		66.7	N
1	9/12/92	10	1		67.1	N
1	9/12/92	11	1		67.1	N
1	9/12/92	12	1		67.3	Y
1	9/20/92	1	1		64.1	N
1	9/20/92	2	1		65	N
1	9/20/92	4	1		67.4	N
1	9/20/92	5	1		67.7	N
1	9/20/92	6	1		67.7	N
1	9/20/92	7	1		67.8	N
1	9/20/92	8	1		67.9	N
1	9/20/92	9	1		67.9	N
1	9/20/92	10	1		67.9	N
1	9/20/92	11	1		68	N
1	9/20/92	12	1		68.1	Y
1	9/27/92	1	1		62.2	N
1	9/27/92	2	1		63.1	N
1	9/27/92	4	1		65.1	N
1	9/27/92	5	1		65.5	N
1	9/27/92	6	1		65.7	Y
1	9/27/92	7	1		65.6	N
1	9/27/92	8	1		65.6	N
1	9/27/92	9	1		65.6	N
1	9/27/92	10	1		64.4	N
1	9/27/92	11	1		64.3	N
1	9/27/92	12	1		64.4	N
1	10/1/92	1	1		63.5	N
1	10/1/92	2	1		64.6	N
1	10/1/92	3	1		70.2	N
1	10/1/92	4	1		66.5	N
1	10/1/92	5	1		66.8	N

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	10/1/92	6	1		66.9	Y	
1	10/1/92	7	1		66.9	N	
1	10/1/92	8	1		66.9	N	
1	10/1/92	9	1		66.9	N	
1	10/1/92	10	1		66.8	N	
1	10/1/92	11	1		66.8	N	
1	10/1/92	12	1		66.5	N	
1	10/10/92	1	1		63.8	N	J 910126143-48
1	10/10/92	2	1		64.9	N	
1	10/10/92	3	1		69.4	Y	
1	10/10/92	4	1		66.9	N	
1	10/10/92	5	1		67.2	N	
1	10/10/92	6	1		67.4	N	
1	10/10/92	7	1		67.5	N	
1	10/10/92	8	1		67.5	N	
1	10/10/92	9	1		67.5	N	
1	10/10/92	10	1		67.5	N	
1	10/10/92	11	1		67.5	N	
1	10/10/92	12	1		67.6	N	
1	10/18/92	1	1		65.4	N	J 910125143-40
1	10/18/92	2	1		66.4	N	
1	10/18/92	3	1		65.6	N	
1	10/18/92	4	1		68.3	N	
1	10/18/92	5	1		68.5	N	
1	10/18/92	6	1		68.6	N	
1	10/18/92	7	1		68.6	N	
1	10/18/92	8	1		68.7	N	
1	10/18/92	9	1		68.7	N	
1	10/18/92	10	1		68.8	N	
1	10/18/92	11	1		68.8	N	
1	10/18/92	12	1		69.1	Y	
1	10/23/92	1	1		64.4	N	J 910126143-66
1	10/23/92	2	1		65.6	N	
1	10/23/92	3	1		69.1	Y	
1	10/23/92	4	1		67.3	N	
1	10/23/92	5	1		67.6	N	
1	10/23/92	6	1		67.8	N	
1	10/23/92	7	1		67.8	N	
1	10/23/92	8	1		67.9	N	
1	10/23/92	9	1		67.9	N	
1	10/23/92	10	1		67.9	N	
1	10/23/92	11	1		67.8	N	
1	10/23/92	12	1		67.8	N	
1	10/28/92	1	1		65.8	N	J 91012614366
1	10/28/92	2	1		66.6	N	
1	10/28/92	3	1		65.2	N	
1	10/28/92	4	1		68.3	N	
1	10/28/92	5	1		68.6	N	
1	10/28/92	6	1		68.5	N	
1	10/28/92	7	1		68.6	N	
1	10/28/92	8	1		68.6	N	
1	10/28/92	9	1		68.6	N	
1	10/28/92	10	1		68.6	N	
1	10/28/92	11	1		68.7	N	
1	10/28/92	12	1		68.9	Y	
1	11/7/92	1	1		64.9	N	J 910126143-48
1	11/7/92	2	1		65.9	N	
1	11/7/92	3	1		65.9	N	
1	11/7/92	4	1		67.3	N	
1	11/7/92	5	1		67.4	N	
1	11/7/92	6	1		67.4	N	
1	11/7/92	7	1		67.5	N	
1	11/7/92	8	1		67.6	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110 THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	11/7/92	9	1		67.6	N	
1	11/7/92	10	1		67.6	N	
1	11/7/92	11	1		67.6	N	
1	11/7/92	12	1		67.7	Y	
1	11/15/92	1	1		63.8	N	J 890423320-42
1	11/15/92	2	1		64.8	N	
1	11/15/92	3	1		64.6	N	
1	11/15/92	4	1		65.8	N	
1	11/15/92	5	1		65.9	N	
1	11/15/92	6	1		66	N	
1	11/15/92	7	1		66	N	
1	11/15/92	8	1		66	N	
1	11/15/92	9	1		66.1	N	
1	11/15/92	10	1		66.1	N	
1	11/15/92	11	1		66.1	N	
1	11/15/92	12	1		66.2	Y	
1	11/21/92	1	1		65.4	N	J 910126143-14
1	11/21/92	2	1		66.1	N	
1	11/21/92	3	1		68.5	Y	
1	11/21/92	4	1		66.7	N	
1	11/21/92	5	1		66.6	N	
1	11/21/92	6	1		66.5	N	
1	11/21/92	7	1		66.4	N	
1	11/21/92	8	1		66.4	N	
1	11/21/92	9	1		66.5	N	
1	11/21/92	10	1		66.5	N	
1	11/21/92	11	1		66.7	N	
1	11/21/92	12	1		67.1	N	
1	11/27/92	1	1		67.2	N	J 890523512-20
1	11/27/92	2	1		68	N	
1	11/27/92	3	1		66.5	N	
1	11/27/92	4	1		68.4	Y	
1	11/27/92	5	1		68.4	N	
1	11/27/92	6	1		68.4	N	
1	11/27/92	7	1		68.4	N	
1	11/27/92	8	1		68.4	N	
1	11/27/92	9	1		68.4	N	
1	11/27/92	10	1		68.3	N	
1	11/27/92	11	1		68.3	N	
1	11/27/92	12	1		68.3	N	
1	12/5/92	1	1		64.9	N	J 890423320-42 TC#3 BAD
1	12/5/92	2	1		65.5	N	
1	12/5/92	4	1		65.7	N	
1	12/5/92	5	1		65.7	N	
1	12/5/92	6	1		65.7	N	
1	12/5/92	7	1		65.8	Y	
1	12/5/92	8	1		65.8	N	
1	12/5/92	9	1		65.8	N	
1	12/5/92	10	1		65.8	N	
1	12/5/92	11	1		65.7	N	
1	12/5/92	12	1		65.8	N	
1	12/12/92	1	1		66.1	N	J 910126143-40 TC# SUSPECT
1	12/12/92	2	1		66.7	Y	
1	12/12/92	4	1		66.5	N	
1	12/12/92	5	1		66.5	N	
1	12/12/92	6	1		66.5	N	
1	12/12/92	7	1		66.6	N	
1	12/12/92	8	1		66.6	N	
1	12/12/92	9	1		66.7	N	
1	12/12/92	10	1		66.6	N	
1	12/12/92	11	1		66.6	N	
1	12/12/92	12	1		66.6	N	
1	12/19/92	1	1		66.2	N	J 910126143-14

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	12/19/92	2	1		66.8	Y	
1	12/19/92	4	1		66.1	N	
1	12/19/92	5	1		66	N	
1	12/19/92	6	1		66	N	
1	12/19/92	7	1		66	N	
1	12/19/92	8	1		66	N	
1	12/19/92	9	1		66	N	
1	12/19/92	10	1		65.9	N	
1	12/19/92	11	1		65.9	N	
1	12/19/92	12	1		65.9	N	
1	12/25/92	1	1		67.1	N	J 890523512-20
1	12/25/92	2	1		67.7	Y	
1	12/25/92	3	1		65.8	N	
1	12/25/92	4	1		66.5	N	
1	12/25/92	5	1		66.4	N	
1	12/25/92	6	1		66.4	N	
1	12/25/92	7	1		66.4	N	
1	12/25/92	8	1		66.3	N	
1	12/25/92	9	1		66.3	N	
1	12/25/92	10	1		66.1	N	
1	12/25/92	11	1		66	N	
1	12/25/92	12	1		65.8	N	
1	1/1/93	1	1		65	N	J 890523512-47
1	1/1/93	2	1		65.3	Y	
1	1/1/93	4	1		64	N	
1	1/1/93	5	1		63.8	N	
1	1/1/93	6	1		63.8	N	
1	1/1/93	7	1		63.8	N	
1	1/1/93	8	1		63.8	N	
1	1/1/93	9	1		63.8	N	
1	1/1/93	10	1		63.8	N	
1	1/1/93	11	1		63.8	N	
1	1/1/93	12	1		63.7	N	
1	1/9/93	1	1		66.8	N	J 890523512-47
1	1/9/93	2	1		66.9	Y	
1	1/9/93	3	1		61.3	N	
1	1/9/93	4	1		65.1	N	
1	1/9/93	5	1		65	N	
1	1/9/93	6	1		64.9	N	
1	1/9/93	7	1		64.8	N	
1	1/9/93	8	1		64.8	N	
1	1/9/93	9	1		64.8	N	
1	1/9/93	10	1		64.8	N	
1	1/9/93	11	1		64.7	N	
1	1/9/93	12	1		64.6	N	
1	1/18/93	1	1		66.3	N	J TI-042
1	1/18/93	2	1		66.4	Y	
1	1/18/93	3	1		61.9	N	
1	1/18/93	4	1		64.2	N	
1	1/18/93	5	1		64	N	
1	1/18/93	6	1		64	N	
1	1/18/93	7	1		64	N	
1	1/18/93	8	1		63.9	N	
1	1/18/93	9	1		63.9	N	
1	1/18/93	10	1		63.9	N	
1	1/18/93	11	1		64	N	
1	1/18/93	12	1		63.8	N	
1	1/23/93	1	1		67.7	Y	J 890523512-20
1	1/23/93	2	1		67.6	N	
1	1/23/93	3	1		65.4	N	
1	1/23/93	4	1		65.2	N	
1	1/23/93	5	1		64.9	N	
1	1/23/93	6	1		64.8	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	1/23/93	7	1		64.8	N	
1	1/23/93	8	1		64.8	N	
1	1/23/93	9	1		64.8	N	
1	1/23/93	10	1		64.9	N	
1	1/23/93	11	1		64.9	N	
1	1/23/93	12	1		64.8	N	
1	1/31/93	1	1		65.5	Y	J 910126143-40
1	1/31/93	2	1		65.3	N	
1	1/31/93	3	1		63.5	N	
1	1/31/93	4	1		62.7	N	
1	1/31/93	5	1		62.5	N	
1	1/31/93	6	1		62.6	N	
1	1/31/93	7	1		62.5	N	
1	1/31/93	8	1		62.5	N	
1	1/31/93	9	1		62.5	N	
1	1/31/93	10	1		62.4	N	
1	1/31/93	11	1		62.4	N	
1	1/31/93	12	1		62.1	N	
1	2/5/93	1	1		65.1	Y	J 910126143-50
1	2/5/93	2	1		64.9	N	
1	2/5/93	3	1		63.4	N	
1	2/5/93	4	1		62	N	
1	2/5/93	5	1		61.9	N	
1	2/5/93	6	1		62	N	
1	2/5/93	7	1		62	N	
1	2/5/93	8	1		62.1	N	
1	2/5/93	9	1		62	N	
1	2/5/93	10	1		62	N	
1	2/5/93	11	1		62	N	
1	2/5/93	12	1		61.7	N	
1	2/12/93	1	1		62.8	Y	J 890423320-42
1	2/12/93	2	1		62.5	N	
1	2/12/93	3	1		63.5	N	
1	2/12/93	4	1		59.6	N	
1	2/12/93	5	1		59.4	N	
1	2/12/93	6	1		59.4	N	
1	2/12/93	7	1		59.4	N	
1	2/12/93	8	1		59.4	N	
1	2/12/93	9	1		59.3	N	
1	2/12/93	10	1		59.3	N	
1	2/12/93	11	1		59.1	N	
1	2/12/93	12	1		58.6	N	
1	2/18/93	1	1		65.2	Y	J TI-040
1	2/18/93	2	1		64.8	N	
1	2/18/93	3	1		61.6	N	
1	2/18/93	4	1		61.7	N	
1	2/18/93	5	1		61.4	N	
1	2/18/93	7	1		61.4	N	
1	2/18/93	8	1		61.4	N	
1	2/18/93	9	1		61.4	N	
1	2/18/93	10	1		61.3	N	
1	2/18/93	11	1		61.2	N	
1	2/18/93	12	1		60.7	N	
1	2/26/93	1	1		67	Y	J 900925741-79
1	2/26/93	2	1		66	N	
1	2/26/93	3	1		63	N	
1	2/26/93	4	1		63	N	
1	2/26/93	5	1		63	N	
1	2/26/93	6	1		63	N	
1	2/26/93	7	1		63	N	
1	2/26/93	8	1		63	N	
1	2/26/93	9	1		63	N	
1	2/26/93	10	1		63	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	2/26/93	11	1		63	N	
1	2/26/93	12	1		63	N	
1	3/5/93	1	1		57.7	N	J 900925741-79
1	3/5/93	2	1		60.5	N	
1	3/5/93	3	1		62	N	
1	3/5/93	4	1		63.9	Y	
1	3/5/93	5	1		58.5	N	
1	3/5/93	6	1		58.2	N	
1	3/5/93	7	1		58	N	
1	3/5/93	8	1		57.9	N	
1	3/5/93	9	1		57.7	N	
1	3/5/93	10	1		57.8	N	
1	3/5/93	11	1		57.7	N	
1	3/5/93	12	1		57.6	N	
1	3/11/93	1	1		62	N	J 890423320-42
1	3/11/93	2	1		61.4	N	
1	3/11/93	3	1		62.4	Y	
1	3/11/93	4	1		58	N	
1	3/11/93	5	1		57.8	N	
1	3/11/93	6	1		57.9	N	
1	3/11/93	7	1		57.5	N	
1	3/11/93	8	1		57.8	N	
1	3/11/93	9	1		57.5	N	
1	3/11/93	10	1		57.9	N	
1	3/11/93	11	1		57.8	N	
1	3/11/93	12	1		57.4	N	
1	3/19/93	1	1		63.1	Y	J 910126143-14
1	3/19/93	2	1		62.4	N	
1	3/19/93	3	1		62.6	N	
1	3/19/93	4	1		58.8	N	
1	3/19/93	5	1		58.7	N	
1	3/19/93	6	1		58.7	N	
1	3/19/93	7	1		58.7	N	
1	3/19/93	8	1		58.7	N	
1	3/19/93	9	1		58.6	N	
1	3/19/93	10	1		58.6	N	
1	3/19/93	11	1		58.5	N	
1	3/19/93	12	1		57.9	N	
1	3/27/93	1	1		63.6	Y	J 910126143-32
1	3/27/93	2	1		62.9	N	
1	3/27/93	3	1		62.2	N	
1	3/27/93	4	1		59.2	N	
1	3/27/93	5	1		59.1	N	
1	3/27/93	7	1		59.2	N	
1	3/27/93	8	1		59.1	N	
1	3/27/93	9	1		59.1	N	
1	3/27/93	10	1		59.2	N	
1	3/27/93	11	1		59.1	N	
1	3/27/93	12	1		58.5	N	
1	4/2/93	1	1		63.3	N	J 910126143-32
1	4/2/93	2	1		62.5	N	
1	4/2/93	3	1		65.7	Y	
1	4/2/93	4	1		58.8	N	
1	4/2/93	5	1		58.7	N	
1	4/2/93	6	1		58.7	N	
1	4/2/93	7	1		58.7	N	
1	4/2/93	8	1		58.7	N	
1	4/2/93	9	1		58.7	N	
1	4/2/93	10	1		58.5	N	
1	4/2/93	11	1		58.4	N	
1	4/2/93	12	1		57.9	N	
1	4/9/93	1	1		63.4	Y	J 910126143-50
1	4/9/93	2	1		62.5	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	4/9/93	3	1		62.9	N	
1	4/9/93	4	1		58.9	N	
1	4/9/93	5	1		58.7	N	
1	4/9/93	6	1		58.8	N	
1	4/9/93	7	1		58.7	N	
1	4/9/93	8	1		58.7	N	
1	4/9/93	9	1		58.7	N	
1	4/9/93	10	1		58.6	N	
1	4/9/93	11	1		58.5	N	
1	4/9/93	12	1		58	N	
1	4/17/93	1	1		63.3	N	TYPE J 910126143-64
1	4/17/93	2	1		62.5	N	
1	4/17/93	3	1		66.5	Y	
1	4/17/93	4	1		59.1	N	
1	4/17/93	5	1		59	N	
1	4/17/93	6	1		59	N	
1	4/17/93	7	1		59	N	
1	4/17/93	8	1		59	N	
1	4/17/93	9	1		58.9	N	
1	4/17/93	10	1		58.8	N	
1	4/17/93	11	1		58.1	N	
1	4/17/93	12	1		58.1	N	
1	4/24/93	1	1		63.1	Y	J 910126143-50
1	4/24/93	2	1		62.1	N	
1	4/24/93	3	1		62.2	N	
1	4/24/93	4	1		58.9	N	
1	4/24/93	5	1		58.7	N	
1	4/24/93	6	1		58.7	N	
1	4/24/93	7	1		58.6	N	
1	4/24/93	8	1		58.6	N	
1	4/24/93	9	1		58.6	N	
1	4/24/93	10	1		58.5	N	
1	4/24/93	11	1		58.4	N	
1	4/24/93	12	1		57.9	N	
1	5/1/93	1	1		62.3	Y	J 910126143-50
1	5/1/93	2	1		61.6	N	
1	5/1/93	3	1		61.5	N	
1	5/1/93	4	1		58.6	N	
1	5/1/93	5	1		58.5	N	
1	5/1/93	6	1		58.5	N	
1	5/1/93	7	1		58.4	N	
1	5/1/93	8	1		58.4	N	
1	5/1/93	9	1		58.3	N	
1	5/1/93	10	1		58.2	N	
1	5/1/93	11	1		58.1	N	
1	5/1/93	12	1		57.5	N	
1	5/8/93	1	1		62.4	Y	J 910126143-50
1	5/8/93	2	1		61.6	N	
1	5/8/93	3	1		63.1	N	
1	5/8/93	4	1		58.7	N	
1	5/8/93	5	1		58.5	N	
1	5/8/93	6	1		58.5	N	
1	5/8/93	7	1		58.5	N	
1	5/8/93	8	1		58.4	N	
1	5/8/93	9	1		58.3	N	
1	5/8/93	10	1		58.3	N	
1	5/8/93	11	1		58.2	N	
1	5/8/93	12	1		57.9	N	
1	5/13/93	1	1		60.7	N	J910126143-50
1	5/13/93	2	1		60	N	
1	5/13/93	3	1		66.9	Y	
1	5/13/93	4	1		57.3	N	
1	5/13/93	5	1		57.2	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	5/13/93	6	1		57.3	N	
1	5/13/93	7	1		57.2	N	
1	5/13/93	8	1		57.1	N	
1	5/13/93	9	1		57	N	
1	5/13/93	10	1		56.9	N	
1	5/13/93	11	1		56.7	N	
1	5/13/93	12	1		56.1	N	
1	5/22/93	1	1		62.6	Y	J 910126143-64
1	5/22/93	2	1		61.8	N	
1	5/22/93	3	1		61.6	N	
1	5/22/93	4	1		59.4	N	
1	5/22/93	5	1		59.3	N	
1	5/22/93	6	1		76.1	N	
1	5/22/93	7	1		76.4	N	
1	5/22/93	8	1		76.4	N	
1	5/22/93	9	1		76.4	N	
1	5/22/93	10	1		76.5	N	
1	5/22/93	11	1		76.5	N	
1	5/22/93	12	1		76.3	N	
1	5/29/93	1	1		65	N	J 910126143-32
1	5/29/93	2	1		65.2	N	
1	5/29/93	3	1		65.2	Y	
1	5/29/93	4	1		65.3	N	
1	5/29/93	5	1		65.3	N	
1	5/29/93	6	1		65.4	N	
1	5/29/93	7	1		65.4	N	
1	5/29/93	8	1		65.4	N	
1	5/29/93	9	1		65.4	N	
1	5/29/93	10	1		65.4	N	
1	5/29/93	11	1		65.4	N	
1	6/3/93	1	1		69.8	Y	J TI-040
1	6/3/93	2	1		69.8	N	
1	6/3/93	3	1		69.9	N	
1	6/3/93	4	1		69.9	N	
1	6/3/93	5	1		69.9	N	
1	6/3/93	6	1		69.9	N	
1	6/3/93	7	1		69.9	N	
1	6/3/93	8	1		69.9	N	
1	6/3/93	9	1		69.9	N	
1	6/3/93	10	1		69.9	N	
1	6/3/93	11	1		69.9	N	
1	6/3/93	12	1		69.9	N	
1	6/13/93	1	1		64.7	Y	J 890523512-20
1	6/13/93	2	1		64.8	Y	
1	6/13/93	3	1		64.7	N	
1	6/13/93	4	1		64.8	N	
1	6/13/93	5	1		64.8	N	
1	6/13/93	6	1		64.8	N	
1	6/13/93	7	1		64.8	N	
1	6/13/93	8	1		64.8	N	
1	6/13/93	9	1		64.8	N	
1	6/13/93	10	1		64.8	N	
1	6/13/93	11	1		64.8	N	
1	6/13/93	12	1		64.8	N	
1	6/19/93	1	1		72.5	Y	J 890523512-20 SELEC. SWITCH MALFUNC.
1	6/19/93	2	1		61.4	N	
1	6/19/93	3	1		61.6	N	
1	6/19/93	4	1		61.6	N	
1	6/19/93	5	1		72.6	N	
1	6/19/93	6	1		72.6	N	
1	6/19/93	7	1		72.6	N	
1	6/19/93	8	1		72.6	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	6/19/93	9	1		72.6	N	
1	6/19/93	10	1		72.6	N	
1	6/19/93	11	1		72.6	N	
1	6/19/93	12	1		72.6	N	
1	6/23/93	1	1		68.5	Y	J 910126143-14. SELEC. SWCH NOT INDEXING, J3 WRITTEN
1	6/23/93	2	1		68.5	N	
1	6/23/93	3	1		68.5	N	
1	6/23/93	4	1		68.5	N	
1	6/23/93	5	1		68.5	N	
1	6/23/93	6	1		68.5	N	
1	6/23/93	7	1		68.6	N	
1	6/23/93	8	1		68.6	N	
1	6/23/93	9	1		68.6	N	
1	6/23/93	10	1		68.6	N	
1	6/23/93	11	1		68.6	N	
1	6/23/93	12	1		68.6	N	
	7/16/93	1	1		67.3	Y	
1	7/16/93	2	1		65.3	N	
1	7/16/93	3	1		64	N	
1	7/16/93	4	1		64.6	N	
1	7/16/93	5	1		64.8	N	
1	7/16/93	6	1		64.6	N	
1	7/16/93	7	1		64.2	N	
1	7/16/93	8	1		65	N	
1	7/16/93	9	1		65.4	N	
1	7/16/93	10	1		65.5	N	
1	7/16/93	11	1		66.4	N	
1	7/16/93	12	1		65.9	N	
1	7/23/93	1	1		62	N	J 817-13-55-001
1	7/23/93	2	1		67.9	Y	
1	7/23/93	3	1		64.4	N	
1	7/23/93	4	1		66.1	N	
1	7/23/93	5	1		67.1	N	
1	7/23/93	6	1		66.5	N	
1	7/23/93	7	1		65.6	N	
1	7/23/93	8	1		65.4	N	
1	7/23/93	9	1		65.4	N	
1	7/23/93	10	1		66.5	N	
1	7/23/93	11	1		66.7	N	
1	7/23/93	12	1		66.6	N	
1	7/24/93	1	1		67.7	N	J 910126143-42
1	7/24/93	2	1		67.7	N	
1	7/24/93	3	1		67.7	N	
1	7/24/93	4	1		67.7	N	
1	7/24/93	5	1		67.7	N	
1	7/24/93	6	1		67.7	N	
1	7/24/93	7	1		67.7	N	
1	7/24/93	8	1		67.7	N	
1	7/24/93	9	1		67.8	Y	
1	7/24/93	10	1		67.8	N	
1	7/24/93	11	1		67.8	N	
1	7/24/93	12	1		67.8	N	
1	8/13/93	1	1		72.2	N	
1	8/13/93	2	1		72.3	N	
1	8/13/93	3	1		72.3	N	
1	8/13/93	4	1		72.3	N	
1	8/13/93	5	1		72.3	N	
1	8/13/93	6	1		72.3	N	
1	8/13/93	7	1		72.3	N	
1	8/13/93	8	1		72.4	N	
1	8/13/93	9	1		72.4	N	
1	8/13/93	10	1		72.4	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	8/13/93	11	1		72.5	Y	
1	8/13/93	12	1		72.5	N	
1	8/23/93	2	1		75.2	N	
1	8/23/93	3	1		75.1	N	
1	8/23/93	4	1		75.1	N	
1	8/23/93	5	1		75.1	N	
1	8/23/93	6	1		75	N	
1	8/23/93	7	1		75.1	N	
1	8/23/93	8	1		75.2	N	
1	8/23/93	9	1		75.2	N	
1	8/23/93	10	1		74.9	N	
1	8/23/93	11	1		75	N	
1	8/23/93	12	1		74.9	N	
1	8/26/93	1	1		71.4	N	J 9101265143-48
1	8/26/93	2	1		71.4	N	
1	8/26/93	3	1		71.4	N	
1	8/26/93	4	1		71.5	N	
1	8/26/93	5	1		71.5	N	
1	8/26/93	6	1		71.6	N	
1	8/26/93	7	1		71.5	N	
1	8/26/93	8	1		71.6	N	
1	8/26/93	9	1		71.6	N	
1	8/26/93	10	1		71.7	Y	
1	8/26/93	11	1		71.7	N	
1	8/26/93	12	1		71.7	N	
1	9/3/93	2	1		76	N	
1	9/3/93	3	1		76	N	
1	9/3/93	4	1		76	N	
1	9/3/93	5	1		76	N	
1	9/3/93	6	1		76	N	
1	9/3/93	7	1		77	N	
1	9/3/93	8	1		76	N	
1	9/3/93	9	1		76	N	
1	9/3/93	10	1		76	N	
1	9/3/93	11	1		76	N	
1	9/3/93	12	1		77	N	
1	9/9/93	1	1		74.9	N	J 910126143-39 SUSPECT DATA
1	9/9/93	2	1		74.9	N	
1	9/9/93	3	1		74.9	N	
1	9/9/93	4	1		75	N	
1	9/9/93	5	1		75	N	
1	9/9/93	6	1		75	N	
1	9/9/93	7	1		75	N	
1	9/9/93	8	1		75	N	
1	9/9/93	9	1		75	N	
1	9/9/93	10	1		75	N	
1	9/9/93	11	1		75	N	
1	9/16/93	1	1		62	Y	J 900925741-79
1	9/16/93	2	1		62	N	
1	9/16/93	3	1		62	N	
1	9/16/93	4	1		62	N	
1	9/16/93	5	1		62	N	
1	9/16/93	6	1		62	N	
1	9/16/93	7	1		62	N	
1	9/16/93	8	1		62	N	
1	9/16/93	9	1		62	N	
1	9/16/93	10	1		62	N	
1	9/16/93	11	1		62	N	
1	9/16/93	12	1		62	N	
1	9/25/93	2	1		95.5	N	
1	9/25/93	3	1		95.5	N	
1	9/25/93	4	1		95.5	N	
1	9/25/93	5	1		95.4	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	9/25/93	6	1		95.4	N	
1	9/25/93	7	1		95.4	N	
1	9/25/93	8	1		95.4	N	
1	9/25/93	9	1		95.4	N	
1	9/25/93	10	1		95.3	N	
1	9/25/93	11	1		95.3	N	
1	9/25/93	12	1		95.3	N	
1	9/30/93	2	1		100.4	N	
1	9/30/93	3	1		100.3	N	
1	9/30/93	4	1		100.3	N	
1	9/30/93	5	1		100.3	N	
1	9/30/93	6	1		100.2	N	
1	9/30/93	7	1		100.3	N	
1	9/30/93	8	1		100.3	N	
1	9/30/93	9	1		100.2	N	
1	9/30/93	10	1		100.2	N	
1	9/30/93	11	1		100.2	N	
1	9/30/93	12	1		100.2	N	
1	10/1/93	2	1		102.1	N	
1	10/1/93	3	1		102	N	
1	10/1/93	4	1		101.7	N	
1	10/1/93	5	1		101.8	N	
1	10/1/93	6	1		101.9	N	
1	10/1/93	7	1		101.6	N	
1	10/1/93	8	1		101.9	N	
1	10/1/93	9	1		101.8	N	
1	10/1/93	10	1		101.8	N	
1	10/1/93	11	1		101.7	N	
1	10/1/93	12	1		101.7	N	
1	10/8/93	1	1		70	Y	J BOX HOOK UP USED
1	10/8/93	2	1		69	N	
1	10/8/93	3	1		69	N	
1	10/8/93	4	1		69	N	
1	10/8/93	5	1		69	N	
1	10/8/93	6	1		69	N	
1	10/8/93	7	1		69	N	
1	10/8/93	8	1		69	N	
1	10/8/93	9	1		69	N	
1	10/8/93	10	1		69	N	
1	10/8/93	11	1		69	N	
1	10/8/93	12	1		69	N	
1	10/8/93	1	2		70	Y	TMACS HOOK UP USED
1	10/8/93	2	2		70	N	
1	10/8/93	3	2		70	N	
1	10/8/93	4	2		70	N	
1	10/8/93	5	2		70	N	
1	10/13/93	2	1		75	N	
1	10/13/93	3	1		75.1	N	
1	10/13/93	4	1		75	N	
1	10/20/93	2	1		76.2	N	
1	10/20/93	3	1		76.1	N	
1	10/20/93	4	1		76.1	N	
1	10/20/93	5	1		76	N	
1	10/20/93	6	1		76.1	N	
1	10/20/93	7	1		75.9	N	
1	10/20/93	8	1		75.9	N	
1	10/20/93	9	1		75.9	N	
1	10/20/93	10	1		75.8	N	
1	10/20/93	11	1		75.8	N	
1	10/20/93	12	1		75.7	N	
1	10/26/93	1	1		65.2	Y	J 910126143-50
1	10/26/93	2	1		65.2	N	
1	10/26/93	3	1		65.2	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	10/26/93	4	1		65.2	N	
1	10/26/93	5	1		65.1	N	
1	10/26/93	6	1		65.1	N	
1	10/26/93	7	1		65.2	N	
1	10/26/93	8	1		65.2	N	
1	10/26/93	9	1		65.1	N	
1	10/26/93	10	1		65.2	N	
1	10/26/93	11	1		65.2	N	
1	10/26/93	12	1		65.2	N	
1	10/29/93	1	1		70.5	N	J 817-13-55-004
1	10/29/93	2	1		71	Y	
1	10/29/93	3	1		70.5	N	
1	10/29/93	4	1		70.5	N	
1	10/29/93	5	1		70.9	N	
1	10/29/93	6	1		69.9	N	
1	10/29/93	7	1		70	N	
1	10/29/93	8	1		68.4	N	
1	10/29/93	9	1		67.9	N	
1	10/29/93	10	1		68	N	
1	10/29/93	11	1		67.9	N	
1	10/29/93	12	1		68.5	N	
1	11/8/93	1	1		62	N	J 777-13-20-010
1	11/8/93	2	1		63	N	
1	11/8/93	3	1		64	N	
1	11/8/93	4	1		65	N	
1	11/8/93	5	1		65	N	
1	11/8/93	6	1		67	N	
1	11/8/93	7	1		67	N	
1	11/8/93	8	1		68	N	
1	11/8/93	9	1		67	N	
1	11/8/93	10	1		67	N	
1	11/8/93	11	1		69	Y	
1	11/8/93	12	1		69	N	
1	11/15/93	1	1		67	N	777-13-20-010
1	11/15/93	2	1		67	N	
1	11/15/93	3	1		68	Y	
1	11/15/93	4	1		68	N	
1	11/15/93	5	1		68	N	
1	11/15/93	6	1		68	N	
1	11/15/93	7	1		67	N	
1	11/15/93	8	1		67	N	
1	11/15/93	9	1		68	N	
1	11/15/93	10	1		68	N	
1	11/15/93	11	1		68	N	
1	11/15/93	12	1		68	N	
1	11/22/93	1	1		69	N	J 777-13-20-010
1	11/22/93	2	1		71	N	
1	11/22/93	3	1		72	N	
1	11/22/93	4	1		72	N	
1	11/22/93	6	1		73	N	
1	11/22/93	7	1		72	N	
1	11/22/93	8	1		72	N	
1	11/22/93	9	1		72	N	
1	11/22/93	10	1		71	N	
1	11/22/93	11	1		72	N	
1	11/22/93	12	1		71	N	
1	11/29/93	1	1		73	N	J 777-13-20-010
1	11/29/93	2	1		70	N	
1	11/29/93	3	1		74	N	
1	11/29/93	4	1		75	N	
1	11/29/93	5	1		74	N	
1	11/29/93	7	1		78	N	
1	11/29/93	8	1		77	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-110							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	11/29/93	9	1		75	N	
1	12/6/93	1	1		69	N	J
1	12/6/93	2	1		70	N	
1	12/6/93	3	1		70	N	
1	12/6/93	4	1		72	Y	
1	12/6/93	5	1		71	N	
1	12/6/93	6	1		72	N	
1	12/6/93	7	1		72	N	
1	12/6/93	8	1		71	N	
1	12/6/93	9	1		72	N	
1	12/6/93	10	1		71	N	
1	12/6/93	11	1		70	N	
1	12/6/93	12	1		70	N	
1	12/14/93	1	1		85	N	J 817-13-55-006 SUSPECT DATA
1	12/14/93	2	1		87	N	
1	12/14/93	3	1		87	N	
1	12/14/93	4	1		87	N	
1	12/14/93	5	1		85	N	
1	12/14/93	6	1		87	N	
1	12/14/93	7	1		86	N	
1	12/14/93	8	1		87	N	
1	12/14/93	9	1		88	Y	
1	12/14/93	10	1		87	N	
1	12/14/93	11	1		88	N	
1	12/14/93	12	1		86	N	
1	12/20/93	1	1		67	N	J 777-13-20-010
1	12/20/93	2	1		71	Y	
1	12/20/93	3	1		69	N	
1	12/20/93	4	1		71	N	
1	12/20/93	5	1		69	N	
1	12/20/93	6	1		69	N	
1	12/20/93	7	1		68	N	
1	12/20/93	8	1		68	N	
1	12/20/93	9	1		68	N	
1	12/20/93	10	1		59	N	
1	12/20/93	11	1		57	N	
1	12/27/93	1	1		70	N	J 777-13-20-010
1	12/27/93	2	1		73	Y	
1	12/27/93	3	1		69	N	
1	12/27/93	4	1		71	N	
1	12/27/93	5	1		71	N	
1	12/27/93	6	1		72	N	
1	12/27/93	7	1		71	N	
1	12/27/93	8	1		72	N	
1	12/27/93	9	1		71	N	
1	12/27/93	10	1		69	N	
1	12/27/93	11	1		69	N	
1	12/27/93	12	1		69	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	9/18/74	1	1	28.89	84.002	N	degree C/TWINS confirm
1	9/18/74	2	1	29.44	84.992	N	degree C/TWINS confirm
1	9/18/74	3	1	29.44	84.992	N	degree C/TWINS confirm
1	9/18/74	4	1	29.44	84.992	N	degree C/TWINS confirm
1	9/18/74	5	1	30	86	Y	degree C/TWINS confirm
1	9/18/74	6	1	30	86	N	degree C/TWINS confirm
1	9/18/74	7	1	30	86	N	degree C/TWINS confirm
1	9/18/74	8	1	30	86	N	degree C/TWINS confirm
1	9/18/74	9	1	28.33	82.994	N	degree C/TWINS confirm
1	9/18/74	10	1	28.33	82.994	N	degree C/TWINS confirm
1	9/18/74	11	1	28.33	82.994	N	degree C/TWINS confirm
1	9/18/74	12	1	28.33	82.994	N	degree C/TWINS confirm
1	12/11/74	1	1	31.11	87.998	N	degree C/TWINS confirm
1	12/11/74	2	1	31.11	87.998	N	degree C/TWINS confirm
1	12/11/74	3	1	31.67	89.006	Y	degree C/TWINS confirm
1	12/11/74	4	1	31.67	89.006	N	degree C/TWINS confirm
1	12/11/74	5	1	31.67	89.006	N	degree C/TWINS confirm
1	12/11/74	6	1	30	86	N	degree C/TWINS confirm
1	12/11/74	7	1	28.89	84.002	N	degree C/TWINS confirm
1	12/11/74	8	1	28.89	84.002	N	degree C/TWINS confirm
1	12/11/74	9	1	26.67	80.006	N	degree C/TWINS confirm
1	12/11/74	10	1	26.67	80.006	N	degree C/TWINS confirm
1	12/11/74	11	1	26.67	80.006	N	degree C/TWINS confirm
1	12/11/74	12	1	26.67	80.006	N	degree C/TWINS confirm
1	2/10/75	1	1	26.67	84	N	degree C/TWINS confirm
1	2/10/75	2	1	26.67	86	N	degree C/TWINS confirm
1	2/10/75	3	1	26.67	87	Y	degree C/TWINS confirm
1	2/10/75	4	1	26.67	86	N	degree C/TWINS confirm
1	2/10/75	5	1	26.67	85	N	degree C/TWINS confirm
1	2/10/75	6	1	26.67	81	N	degree C/TWINS confirm
1	2/10/75	7	1	26.67	75	N	degree C/TWINS confirm
1	2/10/75	8	1	26.67	73	N	degree C/TWINS confirm
1	2/10/75	9	1	26.67	70	N	degree C/TWINS confirm
1	2/10/75	10	1	26.67	70	N	degree C/TWINS confirm
1	2/10/75	11	1	26.67	70	N	degree C/TWINS confirm
1	2/10/75	12	1	26.67	69	N	degree C/TWINS confirm
1	4/10/75	1	1	30	69	N	degree C/TWINS confirm
1	4/10/75	2	1	31	69	Y	degree C/TWINS confirm
1	4/10/75	3	1	30	69	N	degree C/TWINS confirm
1	4/10/75	4	1	30	69	N	degree C/TWINS confirm
1	4/10/75	5	1	28	69	N	degree C/TWINS confirm
1	4/10/75	6	1	26	69	N	degree C/TWINS confirm
1	4/10/75	7	1	24	69	N	degree C/TWINS confirm
1	4/10/75	8	1	23	69	N	degree C/TWINS confirm
1	4/10/75	9	1	20	69	N	degree C/TWINS confirm
1	4/10/75	10	1	20	69	N	degree C/TWINS confirm
1	4/10/75	11	1	20	69	N	degree C/TWINS confirm
1	4/10/75	12	1	20	69	N	degree C/TWINS confirm
1	4/4/76	1	1		80	N	
1	4/4/76	2	1		81	Y	
1	4/4/76	3	1		81	N	
1	4/4/76	4	1		81	N	
1	4/4/76	5	1		79	N	
1	4/4/76	6	1		74	N	
1	4/4/76	7	1		68	N	
1	4/4/76	8	1		66	N	
1	4/4/76	9	1		63	N	
1	4/4/76	10	1		62	N	
1	4/4/76	11	1		62	N	
1	4/4/76	12	1		61	N	
1	7/20/76	1	1		74	N	
1	7/20/76	2	1		75	Y	
1	7/20/76	3	1		75	N	
1	7/20/76	4	1		75	N	
1	7/20/76	5	1		73	N	
1	7/20/76	6	1		69	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111						
THERMOCOUPLE DATA						
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP
1	7/20/76	7	1		66	N
1	7/20/76	8	1		65	N
1	7/20/76	9	1		64	N
1	7/20/76	10	1		64	N
1	7/20/76	11	1		64	N
1	7/20/76	12	1		63	N
1	4/26/77	1	1		76	N
1	4/26/77	2	1		77	Y
1	4/26/77	3	1		74	N
1	4/26/77	4	1		68	N
1	4/26/77	5	1		65	N
1	4/26/77	6	1		64	N
1	4/26/77	7	1		64	N
1	4/26/77	8	1		63	Y
1	4/26/77	9	1		63	Y
1	4/26/77	10	1		63	N
1	4/26/77	11	1		62	N
1	4/26/77	12	1		62	N
1	7/26/77	1	1		68	Y
1	7/26/77	2	1		68	N
1	7/26/77	3	1		68	N
1	7/26/77	4	1		66	N
1	7/26/77	5	1		64	N
1	7/26/77	6	1		64	N
1	7/26/77	7	1		64	N
1	7/26/77	8	1		64	N
1	7/26/77	9	1		64	N
1	7/26/77	10	1		64	N
1	7/26/77	11	1		64	N
1	7/26/77	12	1		63	N
1	1/16/78	1	1		82	N
1	1/16/78	2	1		83	Y
1	1/16/78	3	1		81	N
1	1/16/78	4	1		78	N
1	1/16/78	5	1		76	N
1	1/16/78	6	1		76	N
1	1/16/78	7	1		76	N
1	1/16/78	8	1		76	N
1	1/16/78	9	1		76	N
1	1/16/78	10	1		76	N
1	1/16/78	11	1		76	N
1	1/16/78	12	1		76	N
1	4/28/78	1	1		84	N
1	4/28/78	2	1		88	Y
1	4/28/78	3	1		83	N
1	4/28/78	4	1		80	N
1	4/28/78	5	1		78	N
1	4/28/78	6	1		78	N
1	4/28/78	7	1		78	N
1	4/28/78	8	1		78	N
1	4/28/78	9	1		77	N
1	4/28/78	10	1		77	N
1	4/28/78	11	1		76	N
1	4/28/78	12	1		76	N
1	7/16/78	1	1		76	Y
1	7/16/78	2	1		75	N
1	7/16/78	3	1		73	N
1	7/16/78	4	1		72	N
1	7/16/78	5	1		72	N
1	7/16/78	6	1		71	N
1	7/16/78	7	1		71	N
1	7/16/78	8	1		71	N
1	7/16/78	9	1		71	N
1	7/16/78	10	1		71	N
1	7/16/78	11	1		71	N
1	7/16/78	12	1		71	N

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	7/16/78	13	1		71	N	
1	11/14/78	1	1		72	N	
1	11/14/78	2	1		74	Y	
1	11/14/78	3	1		72	N	
1	11/14/78	4	1		70	N	
1	11/14/78	5	1		69	N	
1	11/14/78	6	1		69	N	
1	11/14/78	7	1		69	N	
1	11/14/78	8	1		69	N	
1	11/14/78	9	1		70	N	
1	11/14/78	10	1		71	N	
1	11/14/78	11	1		71	N	
1	11/14/78	12	1		71	N	
1	1/5/79	1	1		80	Y	
1	1/5/79	2	1		80	N	
1	1/5/79	3	1		80	N	
1	1/5/79	4	1		77	N	
1	1/5/79	5	1		76	N	
1	1/5/79	6	1		75	N	
1	1/5/79	7	1		75	N	
1	1/5/79	8	1		71	N	
1	1/5/79	9	1		76	N	
1	1/5/79	10	1		71	N	
1	1/5/79	11	1		71	N	
1	1/5/79	12	1		75	N	
1	4/7/79	1	1		75	Y	
1	4/7/79	2	1		74	N	
1	4/7/79	3	1		71	N	
1	4/7/79	4	1		67	N	
1	4/7/79	5	1		66	N	
1	4/7/79	6	1		66	N	
1	4/7/79	7	1		66	N	
1	4/7/79	8	1		65	N	
1	4/7/79	9	1		65	N	
1	4/7/79	10	1		65	N	
1	4/7/79	11	1		65	N	
1	4/7/79	12	1		65	N	
1	7/1/79	1	1		77	Y	
1	7/1/79	2	1		75	N	
1	7/1/79	3	1		74	N	
1	7/1/79	4	1		72	N	
1	7/1/79	5	1		71	N	
1	7/1/79	6	1		71	N	
1	7/1/79	7	1		71	N	
1	7/1/79	8	1		72	N	
1	7/1/79	9	1		72	N	
1	7/1/79	10	1		72	N	
1	7/1/79	11	1		71	N	
1	7/1/79	12	1		71	N	
1	10/8/79	1	1		75	N	
1	10/8/79	2	1		76	Y	
1	10/8/79	3	1		76	N	
1	10/8/79	4	1		76	N	
1	10/8/79	5	1		76	N	
1	10/8/79	6	1		76	N	
1	10/8/79	7	1		76	N	
1	10/8/79	8	1		76	N	
1	10/8/79	9	1		76	N	
1	10/8/79	10	1		76	N	
1	10/8/79	11	1		76	N	
1	10/8/79	12	1		76	N	
1	4/4/80	1	1		70	Y	
1	4/4/80	2	1		69	N	
1	4/4/80	3	1		68	N	
1	4/4/80	4	1		64	N	
1	4/4/80	5	1		62	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	4/4/80	6	1		61	N	
1	4/4/80	7	1		61	N	
1	4/4/80	8	1		61	N	
1	4/4/80	9	1		61	N	
1	4/4/80	10	1		61	N	
1	4/4/80	11	1		61	N	
1	4/4/80	12	1		60	N	
1	7/5/80	1	1		70	Y	
1	7/5/80	2	1		70	N	
1	7/5/80	3	1		69	N	
1	7/5/80	4	1		68	N	
1	7/5/80	5	1		67	N	
1	7/5/80	6	1		67	N	
1	7/5/80	7	1		67	N	
1	7/5/80	8	1		67	N	
1	7/5/80	9	1		67	N	
1	7/5/80	10	1		67	N	
1	7/5/80	11	1		67	N	
1	7/5/80	12	1		67	N	
1	10/26/80	1	1		79	N	
1	10/26/80	2	1		80	Y	
1	10/26/80	3	1		80	N	
1	10/26/80	4	1		80	N	
1	10/26/80	5	1		79	N	
1	10/26/80	6	1		79	N	
1	10/26/80	7	1		79	N	
1	10/26/80	8	1		80	N	
1	10/26/80	9	1		80	N	
1	10/26/80	10	1		80	N	
1	10/26/80	11	1		80	N	
1	10/26/80	12	1		80	N	
1	8/10/81	1	1		73	Y	
1	8/10/81	2	1		72	N	
1	8/10/81	3	1		71	N	
1	8/10/81	4	1		71	N	
1	8/10/81	5	1		71	N	
1	8/10/81	6	1		71	N	
1	8/10/81	7	1		71	N	
1	8/10/81	8	1		71	N	
1	8/10/81	9	1		71	N	
1	8/10/81	10	1		71	N	
1	8/10/81	11	1		71	N	
1	8/10/81	12	1		71	N	
1	1/19/82	1	1		83	Y	
1	1/19/82	2	1		83	N	
1	1/19/82	3	1		83	N	
1	1/19/82	4	1		80	N	
1	1/19/82	5	1		79	N	
1	1/19/82	6	1		79	N	
1	1/19/82	7	1		79	N	
1	1/19/82	8	1		79	N	
1	1/19/82	9	1		79	N	
1	1/19/82	10	1		79	N	
1	1/19/82	11	1		79	N	
1	1/19/82	12	1		79	N	
1	4/6/82	1	1		69	Y	
1	4/6/82	2	1		69	N	
1	4/6/82	3	1		67	N	
1	4/6/82	4	1		64	N	
1	4/6/82	5	1		63	N	
1	4/6/82	6	1		63	N	
1	4/6/82	7	1		63	N	
1	4/6/82	8	1		63	N	
1	4/6/82	9	1		63	N	
1	4/6/82	10	1		63	N	
1	4/6/82	11	1		63	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	4/6/82	12	1		63	N	
1	7/13/82	1	1		78	Y	
1	7/13/82	2	1		77	N	
1	7/13/82	3	1		77	N	
1	7/13/82	4	1		76	N	
1	7/13/82	5	1		75	N	
1	7/13/82	6	1		75	N	
1	7/13/82	7	1		75	N	
1	7/13/82	8	1		75	N	
1	7/13/82	9	1		75	N	
1	7/13/82	10	1		75	N	
1	7/13/82	11	1		75	N	
1	7/13/82	12	1		75	N	
1	10/16/82	1	1		72	N	
1	10/16/82	2	1		73	N	
1	10/16/82	3	1		73	N	
1	10/16/82	4	1		73	N	
1	10/16/82	5	1		73	N	
1	10/16/82	6	1		73	N	
1	10/16/82	7	1		73	N	
1	10/16/82	8	1		73	N	
1	10/16/82	9	1		73	N	
1	10/16/82	10	1		73	N	
1	10/16/82	11	1		73	N	
1	10/16/82	12	1		74	Y	
1	4/3/83	1	1		71	Y	
1	4/3/83	2	1		70	N	
1	4/3/83	3	1		68	N	
1	4/3/83	4	1		66	N	
1	4/3/83	5	1		65	N	
1	4/3/83	6	1		64	N	
1	4/3/83	7	1		65	N	
1	4/3/83	8	1		65	N	
1	4/3/83	9	1		65	N	
1	4/3/83	10	1		65	N	
1	4/3/83	11	1		65	N	
1	4/3/83	12	1		65	N	
1	10/13/83	1	1		71	N	
1	10/13/83	2	1		71	N	
1	10/13/83	3	1		72	Y	
1	10/13/83	4	1		72	N	
1	10/13/83	5	1		72	N	
1	10/13/83	6	1		72	N	
1	10/13/83	7	1		72	N	
1	10/13/83	8	1		72	N	
1	10/13/83	9	1		72	N	
1	10/13/83	10	1		72	N	
1	10/13/83	11	1		72	N	
1	10/13/83	12	1		72	N	
1	11/1/83	1	1			N	NO DATA SHEETS IN OFFICE FOR 111-BX 10/83 THRU 1/89 J-2E-OP-020
1	1/29/89	2	1		66	N	
1	1/29/89	3	1		65	N	
1	1/29/89	4	1		65	N	
1	1/29/89	5	1		65	N	
1	1/29/89	6	1		65	N	
1	1/29/89	7	1		64	N	
1	1/29/89	8	1		64	N	
1	1/29/89	9	1		64	N	
1	1/29/89	10	1		64	N	
1	1/29/89	11	1		63	N	
1	1/29/89	12	1		63	N	
1	10/23/89	1	1		72.1	N	
1	10/23/89	2	1		72.6	N	
1	10/23/89	3	1		72.9	N	
1	10/23/89	4	1		73.1	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	10/23/89	5	1		72.9	N	
1	10/23/89	6	1		72.8	N	
1	10/23/89	7	1		72.8	N	
1	10/23/89	8	1		72.8	N	
1	10/23/89	9	1		73	N	
1	10/23/89	10	1		73.2	N	
1	10/23/89	11	1		73.3	N	
1	10/23/89	12	1		73.5	Y	
1	11/2/89	1	1		72	N	
1	11/2/89	2	1		72	N	
1	11/2/89	3	1		73	Y	
1	11/2/89	4	1		73	N	
1	11/2/89	5	1		73	N	
1	11/2/89	6	1		73	N	
1	11/2/89	7	1		73	N	
1	11/2/89	8	1		73	N	
1	11/2/89	9	1		73	N	
1	11/2/89	10	1		73	N	
1	11/2/89	11	1		73	N	
1	11/2/89	12	1		73	N	
1	11/4/89	1	1		71.6	N	
1	11/4/89	2	1		72.2	N	
1	11/4/89	3	1		72.2	N	
1	11/4/89	4	1		72.8	N	
1	11/4/89	5	1		72.8	N	
1	11/4/89	6	1		72.8	N	
1	11/4/89	7	1		72.6	N	
1	11/4/89	8	1		72.7	N	
1	11/4/89	9	1		72.8	N	
1	11/4/89	10	1		72.8	N	
1	11/4/89	11	1		72.8	N	
1	11/4/89	12	1		73	Y	
1	11/10/89	1	1		64	Y	
1	11/10/89	2	1		63.8	N	
1	11/10/89	3	1		64	N	
1	11/10/89	4	1		63.7	N	
1	11/10/89	5	1		63.8	N	
1	11/10/89	6	1		64	N	
1	11/10/89	7	1		64	N	
1	11/10/89	8	1		63.8	N	
1	11/10/89	9	1		63.7	N	
1	11/10/89	10	1		64	N	
1	11/10/89	11	1		64	N	
1	11/10/89	12	1		63.9	N	
1	11/18/89	3	1		73.5	Y	64.3 @ Drywell 21-11-05-Used K-type Potentiometer
1	11/18/89	4	1		73.3	N	
1	11/18/89	5	1		73.1	N	
1	11/18/89	6	1		73	N	
1	11/18/89	7	1		73.1	N	
1	11/18/89	8	1		73.2	N	
1	11/18/89	9	1		73.1	N	
1	11/18/89	10	1		73.2	N	
1	11/18/89	11	1		73.2	N	
1	11/18/89	12	1		73.3	N	
1	11/18/89	1	2		64.7	Y	J 64.7 @ Drywell 21-11-03-(Probe left)
1	11/24/89	1	1		72.6	N	
1	11/24/89	2	1		73.2	N	
1	11/24/89	3	1		73.5	Y	
1	11/24/89	4	1		73.1	N	
1	11/24/89	5	1		72.8	N	
1	11/24/89	6	1		72.7	N	
1	11/24/89	7	1		72.7	N	
1	11/24/89	8	1		72.7	N	
1	11/24/89	9	1		72.8	N	
1	11/24/89	10	1		72.8	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	11/24/89	11	1		72.9	N	
1	12/1/89	1	1		73.2	N	
1	12/1/89	2	1		73.8	N	
1	12/1/89	3	1		74	Y	
1	12/1/89	4	1		73.4	N	
1	12/1/89	5	1		73.1	N	
1	12/1/89	6	1		73	N	
1	12/1/89	7	1		73	N	
1	12/1/89	8	1		72.9	N	
1	12/1/89	9	1		73.1	N	
1	12/1/89	10	1		73.1	N	
1	12/1/89	11	1		73.2	N	
1	12/1/89	12	1		73.2	N	
1	12/10/89	1	1		73	N	J
1	12/10/89	2	1		73.2	N	
1	12/10/89	3	1		73.6	N	
1	12/10/89	4	1		73.9	N	
1	12/10/89	5	1		69.8	N	
1	12/10/89	6	1		70	N	
1	12/10/89	7	1		77.6	N	
1	12/10/89	8	1		77.6	N	
1	12/10/89	9	1		78	Y	
1	12/10/89	10	1		67.6	N	
1	12/10/89	11	1		72.4	N	
1	12/10/89	12	1		72.4	N	
1	12/15/89	1	1		73.5	N	
1	12/15/89	2	1		73.8	Y	
1	12/15/89	3	1		73.7	N	
1	12/15/89	4	1		72.8	N	
1	12/15/89	5	1		72.2	N	
1	12/15/89	6	1		72.8	N	
1	12/15/89	7	1		72	N	
1	12/15/89	8	1		72.1	N	
1	12/15/89	9	1		71.9	N	
1	12/15/89	10	1		72.4	N	
1	12/15/89	11	1		72.5	N	
1	12/15/89	12	1		72.5	N	
1	12/23/89	1	1		73.3	N	
1	12/23/89	2	1		73.8	Y	
1	12/23/89	3	1		73.6	N	
1	12/23/89	4	1		72.5	N	
1	12/23/89	5	1		71.9	N	
1	12/23/89	6	1		71.8	N	
1	12/23/89	7	1		71.8	N	
1	12/23/89	8	1		71.9	N	
1	12/23/89	9	1		71.7	N	
1	12/23/89	10	1		71.8	N	
1	12/23/89	11	1		71.8	N	
1	12/23/89	12	1		71.7	N	
1	12/30/89	2	1		66	Y	
1	12/30/89	3	1		65	N	
1	12/30/89	4	1		65	N	
1	12/30/89	5	1		65	N	
1	12/30/89	6	1		65	N	
1	12/30/89	7	1		64	N	
1	12/30/89	8	1		64	N	
1	12/30/89	9	1		64	N	
1	12/30/89	10	1		64	N	
1	12/30/89	11	1		63	N	J-2E-OP-020
1	1/5/90	1	1		70.5	N	J
1	1/5/90	2	1		70.8	Y	
1	1/5/90	3	1		70.4	N	
1	1/5/90	4	1		69	N	
1	1/5/90	5	1		68.2	N	
1	1/5/90	6	1		68.2	N	
1	1/5/90	7	1		68.1	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	1/5/90	8	1		68.2	N	
1	1/5/90	9	1		68.1	N	
1	1/5/90	10	1		68.2	N	
1	1/5/90	11	1		68.2	N	
1	1/5/90	12	1		68	N	
1	1/13/90	1	1		71	N	J
1	1/13/90	2	1		71.1	Y	
1	1/13/90	3	1		70.5	N	
1	1/13/90	4	1		68.9	N	
1	1/13/90	5	1		68.1	N	
1	1/13/90	6	1		68.1	N	
1	1/13/90	7	1		68.1	N	
1	1/13/90	8	1		68.1	N	
1	1/13/90	9	1		67.9	N	
1	1/13/90	10	1		68.1	N	
1	1/13/90	11	1		68.1	N	
1	1/13/90	12	1		68	N	
1	1/19/90	1	1		70.5	N	J
1	1/19/90	2	1		70.7	Y	
1	1/19/90	3	1		70.2	N	
1	1/19/90	4	1		68.4	N	
1	1/19/90	5	1		67.7	N	
1	1/19/90	6	1		67.7	N	
1	1/19/90	7	1		67.7	N	
1	1/19/90	8	1		67.7	N	
1	1/19/90	9	1		67.4	N	
1	1/19/90	10	1		67.7	N	
1	1/19/90	11	1		67.6	N	
1	1/19/90	12	1		67.4	N	
1	1/26/90	1	1		70.9	N	J
1	1/26/90	2	1		71	Y	
1	1/26/90	3	1		70.1	N	
1	1/26/90	4	1		68.2	N	
1	1/26/90	5	1		67.3	N	
1	1/26/90	6	1		67.2	N	
1	1/26/90	7	1		67.1	N	
1	1/26/90	8	1		67.1	N	
1	1/26/90	9	1		66.8	N	
1	1/26/90	10	1		67.1	N	
1	1/26/90	11	1		67	N	
1	1/26/90	12	1		66.7	N	
1	2/2/90	1	1		72.5	Y	
1	2/2/90	2	1		72.5	N	
1	2/2/90	3	1		71.6	N	
1	2/2/90	4	1		69.7	N	
1	2/2/90	5	1		68.1	N	
1	2/2/90	6	1		68.6	N	
1	2/2/90	7	1		68.5	N	
1	2/2/90	8	1		68.5	N	
1	2/2/90	9	1		68.2	N	
1	2/2/90	10	1		68.4	N	
1	2/2/90	11	1		68.4	N	
1	2/2/90	12	1		68.1	N	J-25-OP-020
1	2/5/90	1	1		70.8	N	
1	2/5/90	2	1		70.9	Y	
1	2/5/90	3	1		70	N	
1	2/5/90	4	1		67.8	N	
1	2/5/90	5	1		66.9	N	
1	2/5/90	6	1		66.8	N	
1	2/5/90	7	1		66.8	N	
1	2/5/90	8	1		66.7	N	
1	2/5/90	9	1		66.4	N	
1	2/5/90	10	1		66.7	N	
1	2/5/90	11	1		66.7	N	
1	2/5/90	12	1		66.3	N	J-2E-OP-021
1	2/11/90	1	1		70.6	Y	J-2E-OP-021

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	2/11/90	2	1		70.5	N	
1	2/11/90	3	1		69.4	N	
1	2/11/90	4	1		67.3	N	
1	2/11/90	5	1		66.5	N	
1	2/11/90	6	1		66.6	N	
1	2/11/90	7	1		67	N	
1	2/11/90	8	1		66.7	N	
1	2/11/90	9	1		66.7	N	
1	2/11/90	10	1		66.4	N	
1	2/11/90	11	1		66	N	
1	2/11/90	12	1		65.8	N	
1	3/2/90	1	1		71.1	Y	J-2E-OP-020
1	3/2/90	2	1		70.5	N	
1	3/2/90	3	1		69	N	
1	3/2/90	4	1		66.7	N	
1	3/2/90	5	1		65.6	N	
1	3/2/90	6	1		65.7	N	
1	3/2/90	7	1		65.7	N	
1	3/2/90	8	1		65.8	N	
1	3/2/90	9	1		65.8	N	
1	3/2/90	10	1		65.7	N	
1	3/2/90	11	1		65.7	N	
1	3/2/90	12	1		65.4	N	
1	4/7/90	1	1		71	Y	J-2E-OP-020
1	4/7/90	2	1		70	N	
1	4/7/90	3	1		69	N	
1	4/7/90	4	1		67	N	
1	4/7/90	5	1		66	N	
1	4/7/90	6	1		66	N	
1	4/7/90	7	1		66	N	
1	4/7/90	8	1		66	N	
1	4/7/90	9	1		66	N	
1	4/7/90	10	1		66	N	
1	4/7/90	11	1		66	N	
1	4/7/90	12	1		65	N	
1	5/5/90	1	1		69	Y	
1	5/5/90	2	1		68	N	
1	5/5/90	3	1		67	N	
1	5/5/90	4	1		65	N	
1	5/5/90	5	1		65	N	
1	5/5/90	6	1		64	N	
1	5/5/90	7	1		64	N	
1	5/5/90	8	1		64	N	
1	5/5/90	9	1		64	N	
1	5/5/90	10	1		64	N	
1	5/5/90	11	1		64	N	
1	5/5/90	12	1		64	N	
1	6/1/90	1	1		70	Y	
1	6/1/90	2	1		69.4	N	
1	6/1/90	3	1		68.3	N	
1	6/1/90	4	1		67	N	
1	6/1/90	5	1		66.9	N	
1	6/1/90	6	1		67.2	N	
1	6/1/90	7	1		67.5	N	
1	6/1/90	8	1		67.8	N	
1	6/1/90	9	1		68	N	
1	6/1/90	10	1		67.8	N	
1	6/1/90	11	1		67.7	N	
1	6/1/90	12	1		67.3	N	
1	7/8/90	1	1		70.3	Y	J-2E-OP-020
1	7/8/90	2	1		69.8	N	
1	7/8/90	3	1		69.1	N	
1	7/8/90	4	1		68.1	N	
1	7/8/90	5	1		67.6	N	
1	7/8/90	6	1		67.5	N	
1	7/8/90	7	1		67.6	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	7/8/90	8	1		67.7	N	
1	7/8/90	9	1		68	N	
1	7/8/90	10	1		68	N	
1	7/8/90	11	1		68.1	N	
1	7/8/90	12	1		68.1	N	
1	8/3/90	1	1		64.6	N	J
1	8/3/90	2	1		65	N	
1	8/3/90	3	1		64.6	N	
1	8/3/90	4	1		64.8	N	
1	8/3/90	5	1		65	N	
1	8/3/90	6	1		65.4	N	
1	8/3/90	7	1		65.5	N	
1	8/3/90	8	1		65.8	N	
1	8/3/90	9	1		65.5	N	
1	8/3/90	10	1		65.3	N	
1	8/3/90	11	1		66.3	N	
1	8/3/90	12	1		66.2	Y	
1	9/10/90	1	1		71	N	J
1	9/10/90	2	1		70.9	N	
1	9/10/90	3	1		71.3	N	
1	9/10/90	4	1		71.9	N	
1	9/10/90	5	1		72	N	
1	9/10/90	6	1		72.1	N	
1	9/10/90	7	1		72.2	N	
1	9/10/90	8	1		72.4	N	
1	9/10/90	9	1		72.4	N	
1	9/10/90	10	1		72.3	N	
1	9/10/90	11	1		72.4	N	
1	9/10/90	12	1		72.6	Y	
1	10/9/90	1	1		70	N	J
1	10/9/90	2	1		70	N	
1	10/9/90	3	1		70	N	
1	10/9/90	4	1		71	N	
1	10/9/90	5	1		71	N	
1	10/9/90	6	1		71	N	
1	10/9/90	7	1		71	N	
1	10/9/90	8	1		71	N	
1	10/9/90	9	1		71	N	
1	10/9/90	10	1		71	N	
1	10/9/90	11	1		71	N	
1	10/9/90	12	1		72	Y	
1	10/22/90	1	1		70.2	N	J 890523512-20
1	10/22/90	2	1		71	N	
1	10/22/90	3	1		71.6	N	
1	10/22/90	4	1		71.9	N	
1	10/22/90	5	1		71.9	N	
1	10/22/90	6	1		71.9	N	
1	10/22/90	7	1		72	N	
1	10/22/90	8	1		72	N	
1	10/22/90	9	1		72	N	
1	10/22/90	10	1		72.1	N	
1	10/22/90	11	1		72.1	N	
1	10/22/90	12	1		72.3	Y	
1	10/26/90	1	1		64.7	N	J-890523512-20
1	10/26/90	2	1		64.9	N	
1	10/26/90	3	1		65.2	N	
1	10/26/90	4	1		65.3	N	
1	10/26/90	5	1		65	N	
1	10/26/90	6	1		65	N	
1	10/26/90	7	1		65	N	
1	10/26/90	8	1		65.2	N	
1	10/26/90	9	1		65.6	N	
1	10/26/90	10	1		65.9	N	
1	10/26/90	11	1		66.2	N	
1	10/26/90	12	1		66.8	Y	
1	10/29/90	1	1		69.3	N	J-890523512-20

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	10/29/90	2	1		69.9	N	
1	10/29/90	3	1		70.5	N	
1	10/29/90	4	1		70.7	N	
1	10/29/90	5	1		70.8	N	
1	10/29/90	6	1		70.6	N	
1	10/29/90	7	1		70.7	N	
1	10/29/90	8	1		70.8	N	
1	10/29/90	9	1		70.9	N	
1	10/29/90	10	1		71	N	
1	10/29/90	11	1		71.1	N	
1	10/29/90	12	1		71.4	Y	
1	11/5/90	1	1		69.7	N	J 890523512-20
1	11/5/90	2	1		70.4	N	
1	11/5/90	3	1		70.8	N	
1	11/5/90	4	1		70.9	N	
1	11/5/90	5	1		70.9	N	
1	11/5/90	6	1		71.1	N	
1	11/5/90	7	1		71.3	N	
1	11/5/90	8	1		71.5	N	
1	11/5/90	9	1		71.6	N	
1	11/5/90	10	1		71.6	N	
1	11/5/90	11	1		71.6	N	
1	11/5/90	12	1		71.8	Y	
1	11/12/90	1	1		68.1	N	2E-OP-021
1	11/12/90	2	1		68.7	N	
1	11/12/90	3	1		69	N	
1	11/12/90	4	1		68.8	N	
1	11/12/90	5	1		68.7	N	
1	11/12/90	6	1		68.7	N	
1	11/12/90	7	1		68.8	N	
1	11/12/90	8	1		68.8	N	
1	11/12/90	9	1		68.9	N	
1	11/12/90	10	1		69	N	
1	11/12/90	11	1		69	N	
1	11/12/90	12	1		69.2	Y	
1	11/18/90	1	1		68.6	N	J-HH-99A-J 890523512-20
1	11/18/90	2	1		69.3	N	
1	11/18/90	3	1		69.6	Y	
1	11/18/90	4	1		69.4	N	
1	11/18/90	5	1		69.2	N	
1	11/18/90	6	1		69.2	N	
1	11/18/90	7	1		69.2	N	
1	11/18/90	8	1		69.3	N	
1	11/18/90	9	1		69.4	N	
1	11/18/90	10	1		69.4	N	
1	11/18/90	11	1		69.4	N	
1	11/18/90	12	1		69.5	N	
1	11/25/90	1	1		70.2	N	J-2E-OP-021
1	11/25/90	2	1		70.8	N	
1	11/25/90	3	1		70.9	N	
1	11/25/90	6	1		70.6	N	
1	11/25/90	7	1		70.7	N	
1	11/25/90	8	1		70.8	N	
1	11/25/90	9	1		70.5	N	
1	11/25/90	10	1		70.6	N	
1	11/25/90	11	1		70.6	N	
1	11/25/90	12	1		72	N	
1	12/5/90	1	1		69.2	Y	J 890523512-20
1	12/5/90	2	1		69.8	Y	
1	12/5/90	3	1		69.8	N	
1	12/5/90	4	1		69.1	N	
1	12/5/90	5	1		68.6	N	
1	12/5/90	6	1		68.5	N	
1	12/5/90	7	1		68.5	N	
1	12/5/90	8	1		68.6	N	
1	12/5/90	9	1		68.6	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111						
THERMOCOUPLE DATA						
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP
1	12/5/90	10	1		68.7	N
1	12/5/90	11	1		68.7	N
1	12/5/90	12	1		68.8	N
1	12/11/90	1	1		69.2	Y
1	12/11/90	2	1		68.9	N
1	12/11/90	3	1		69.2	N
1	12/11/90	4	1		68	N
1	12/11/90	5	1		67.5	N
1	12/11/90	6	1		67.3	N
1	12/11/90	7	1		67.2	N
1	12/11/90	8	1		67.2	N
1	12/11/90	9	1		67.9	N
1	12/11/90	10	1		67.8	N
1	12/11/90	11	1		67.8	N
1	12/11/90	12	1		67.8	N
1	12/15/90	1	1		67	N
1	12/15/90	2	1		67.8	N
1	12/15/90	3	1		67.7	N
1	12/15/90	4	1		66.8	N
1	12/15/90	5	1		66.6	N
1	12/15/90	6	1		68.8	Y
1	12/15/90	7	1		67.1	N
1	12/15/90	8	1		67.2	N
1	12/15/90	9	1		67.3	N
1	12/15/90	10	1		67.2	N
1	12/15/90	11	1		67.1	N
1	12/15/90	12	1		67	N
1	12/22/90	1	1		71	Y
1	12/22/90	2	1		71	N
1	12/22/90	3	1		71	N
1	12/22/90	4	1		69	N
1	12/22/90	5	1		69	N
1	12/22/90	6	1		69	N
1	12/22/90	7	1		69	N
1	12/22/90	8	1		69	N
1	12/22/90	9	1		68	N
1	12/22/90	10	1		69	N
1	12/22/90	11	1		70	N
1	12/22/90	12	1		70	N
1	12/31/90	1	1		70.7	Y
1	12/31/90	2	1		70.1	N
1	12/31/90	3	1		70.8	N
1	12/31/90	4	1		69.2	N
1	12/31/90	5	1		68.7	N
1	12/31/90	6	1		68.6	N
1	12/31/90	7	1		68.7	N
1	12/31/90	8	1		68.8	N
1	12/31/90	9	1		68.8	N
1	12/31/90	10	1		68.8	N
1	12/31/90	11	1		68.8	N
1	12/31/90	12	1		68.6	N
1	1/6/91	1	1		70	N
1	1/6/91	2	1		71	Y
1	1/6/91	3	1		70	N
1	1/6/91	4	1		69	N
1	1/6/91	5	1		68	N
1	1/6/91	6	1		68	N
1	1/6/91	7	1		68	N
1	1/6/91	8	1		68	N
1	1/6/91	9	1		68	N
1	1/6/91	10	1		68	N
1	1/6/91	11	1		68	N
1	1/6/91	12	1		68	N
1	1/13/91	1	1		70	N
1	1/13/91	2	1		70.4	Y
1	1/13/91	3	1		69.8	N

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	1/13/91	4	1		68.7	N	
1	1/13/91	5	1		67.3	N	
1	1/13/91	6	1		67.8	N	
1	1/13/91	7	1		67.3	N	
1	1/13/91	8	1		67.8	N	
1	1/13/91	9	1		67.3	N	
1	1/13/91	10	1		67.2	N	
1	1/13/91	11	1		67.1	N	
1	1/13/91	12	1		66.8	N	
1	1/19/91	1	1		71.5	N	J HH99A-J
1	1/19/91	2	1		71.7	Y	
1	1/19/91	3	1		71	N	
1	1/19/91	4	1		68.9	N	
1	1/19/91	5	1		68	N	
1	1/19/91	6	1		68	N	
1	1/19/91	7	1		67.8	N	
1	1/19/91	8	1		67.8	N	
1	1/19/91	9	1		67.7	N	
1	1/19/91	10	1		67.6	N	
1	1/19/91	11	1		67.6	N	
1	1/19/91	12	1		67.2	N	
1	1/29/91	1	1		69.2	N	J HH-99-A 890523512-20
1	1/29/91	2	1		69.3	Y	
1	1/29/91	3	1		68.3	N	
1	1/29/91	4	1		66.1	N	
1	1/29/91	5	1		65.3	N	
1	1/29/91	6	1		65.3	N	
1	1/29/91	7	1		65.3	N	
1	1/29/91	8	1		65.2	N	
1	1/29/91	9	1		65.2	N	
1	1/29/91	10	1		65.1	N	
1	1/29/91	11	1		65.1	N	
1	1/29/91	12	1		64.8	N	
1	2/3/91	1	1		68	Y	J Ser# 890523512-47
1	2/3/91	2	1		67	N	
1	2/3/91	3	1		66	N	
1	2/3/91	4	1		64	N	
1	2/3/91	5	1		63	N	
1	2/3/91	6	1		63	N	
1	2/3/91	7	1		63	N	
1	2/3/91	8	1		63	N	
1	2/3/91	9	1		63	N	
1	2/3/91	10	1		63	N	
1	2/3/91	11	1		63	N	
1	2/3/91	12	1		62	N	
1	2/9/91	1	1		69	N	J-890523512-47
1	2/9/91	2	1		68.9	N	
1	2/9/91	3	1		67.7	N	
1	2/9/91	4	1		65.3	N	
1	2/9/91	5	1		64.4	N	
1	2/9/91	6	1		64.4	N	
1	2/9/91	7	1		64.3	N	
1	2/9/91	8	1		64.2	N	
1	2/9/91	9	1		64.3	N	
1	2/9/91	10	1		64.2	N	
1	2/9/91	11	1		64.1	N	
1	2/9/91	12	1		63.6	N	
1	2/16/91	1	1		68.1	N	
1	2/16/91	2	1		68	N	
1	2/16/91	3	1		66	N	
1	2/16/91	4	1		64.4	N	
1	2/16/91	5	1		63.4	N	
1	2/16/91	6	1		63.3	N	
1	2/16/91	7	1		63.2	N	
1	2/16/91	8	1		63.1	N	
1	2/16/91	9	1		63.2	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	2/16/91	10	1		63	N	
1	2/16/91	11	1		62.8	N	
1	2/16/91	12	1		62.4	N	
1	2/23/91	1	1		66.3	Y	J 890523512-47
1	2/23/91	2	1		66.1	N	
1	2/23/91	3	1		64.8	N	
1	2/23/91	4	1		62.4	N	
1	2/23/91	5	1		61.6	N	
1	2/23/91	6	1		61.7	N	
1	2/23/91	7	1		61.7	N	
1	2/23/91	8	1		61.6	N	
1	2/23/91	9	1		61.7	N	
1	2/23/91	10	1		61.5	N	
1	2/23/91	11	1		61.4	N	
1	2/23/91	12	1		60.7	N	
1	3/3/91	1	1		67	Y	J 890523512-47
1	3/3/91	2	1		66.5	N	
1	3/3/91	3	1		65.1	N	
1	3/3/91	4	1		62.5	N	
1	3/3/91	5	1		61.6	N	
1	3/3/91	6	1		61.5	N	
1	3/3/91	7	1		61.5	N	
1	3/3/91	8	1		61.4	N	
1	3/3/91	9	1		61.6	N	
1	3/3/91	10	1		61.3	N	
1	3/3/91	11	1		61.3	N	
1	3/3/91	12	1		60.7	N	
1	3/9/91	1	1		71.7	Y	2E-OP-020
1	3/9/91	2	1		71.1	N	
1	3/9/91	3	1		69.3	N	
1	3/9/91	4	1		66.9	N	
1	3/9/91	5	1		66.1	N	
1	3/9/91	6	1		66.2	N	
1	3/9/91	7	1		66.2	N	
1	3/9/91	8	1		66.5	N	
1	3/9/91	9	1		66.1	N	
1	3/9/91	10	1		66	N	
1	3/9/91	11	1		65.4	N	
1	3/9/91	12	1		65.4	N	
1	3/17/91	1	1		69	Y	J 2E-OP-021
1	3/17/91	2	1		68.7	N	
1	3/17/91	3	1		67.2	N	
1	3/17/91	4	1		64.9	N	
1	3/17/91	5	1		64.2	N	
1	3/17/91	6	1		64.3	N	
1	3/17/91	7	1		64.3	N	
1	3/17/91	8	1		64.2	N	
1	3/17/91	9	1		64.6	N	
1	3/17/91	10	1		64	N	
1	3/17/91	11	1		63.7	N	
1	3/17/91	12	1		63	N	
1	3/23/91	1	1		69.4	Y	J 2E-OP-021
1	3/23/91	2	1		68.9	N	
1	3/23/91	3	1		67.3	N	
1	3/23/91	4	1		64.9	N	
1	3/23/91	5	1		64.1	N	
1	3/23/91	6	1		64	N	
1	3/23/91	7	1		64	N	
1	3/23/91	8	1		63.9	N	
1	3/23/91	9	1		64.2	N	
1	3/23/91	10	1		63.7	N	
1	3/23/91	11	1		63.6	N	
1	3/23/91	12	1		63	N	
1	3/30/91	1	1		68	Y	J 890523512-20
1	3/30/91	2	1		67.6	N	
1	3/30/91	3	1		65.8	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	3/30/91	4	1		63.7	N	
1	3/30/91	5	1		63.1	N	
1	3/30/91	6	1		63.4	N	
1	3/30/91	7	1		63.4	N	
1	3/30/91	8	1		63.3	N	
1	3/30/91	9	1		63.9	N	
1	3/30/91	10	1		63.1	N	
1	3/30/91	11	1		63	N	
1	3/30/91	12	1		62.5	N	
1	4/7/91	1	1		70	Y	J 890423320-11
1	4/7/91	2	1		69.4	N	
1	4/7/91	3	1		68	N	
1	4/7/91	4	1		65.8	N	
1	4/7/91	5	1		65.1	N	
1	4/7/91	6	1		65	N	
1	4/7/91	7	1		64.9	N	
1	4/7/91	8	1		64.9	N	
1	4/7/91	9	1		65.3	N	
1	4/7/91	10	1		64.8	N	
1	4/7/91	11	1		64.7	N	
1	4/7/91	12	1		64.1	N	
1	4/14/91	1	1		68.9	Y	J 890523512-20
1	4/14/91	2	1		68.4	N	
1	4/14/91	3	1		66.9	N	
1	4/14/91	4	1		64.8	N	
1	4/14/91	5	1		64.1	N	
1	4/14/91	6	1		64.1	N	
1	4/14/91	7	1		64	N	
1	4/14/91	8	1		64	N	
1	4/14/91	9	1		64.5	N	
1	4/14/91	10	1		63.8	N	
1	4/14/91	11	1		63.7	N	
1	4/14/91	12	1		63.2	N	
1	4/20/91	1	1		67.4	Y	J 890523512-20
1	4/20/91	2	1		67	N	
1	4/20/91	3	1		65.4	N	
1	4/20/91	4	1		63.5	N	
1	4/20/91	5	1		63	N	
1	4/20/91	6	1		63.2	N	
1	4/20/91	7	1		63.1	N	
1	4/20/91	8	1		63	N	
1	4/20/91	9	1		63.7	N	
1	4/20/91	10	1		68.2	N	
1	4/20/91	11	1		62.6	N	
1	4/20/91	12	1		62.1	N	
1	4/28/91	1	1		68.6	Y	J Omega 890523512-20
1	4/28/91	2	1		68.1	N	
1	4/28/91	3	1		66.7	N	
1	4/28/91	4	1		64.9	N	
1	4/28/91	5	1		64.3	N	
1	4/28/91	6	1		64.4	N	
1	4/28/91	7	1		64.4	N	
1	4/28/91	8	1		64.3	N	
1	4/28/91	9	1		64.9	N	
1	4/28/91	10	1		64.2	N	
1	4/28/91	11	1		64.1	N	
1	4/28/91	12	1		63.6	N	
1	5/5/91	1	1		68.2	Y	J 890523512-20
1	5/5/91	2	1		67.7	N	
1	5/5/91	3	1		66.3	N	
1	5/5/91	4	1		64.6	N	
1	5/5/91	5	1		64.1	N	
1	5/5/91	6	1		64.2	N	
1	5/5/91	7	1		64.2	N	
1	5/5/91	8	1		64.2	N	
1	5/5/91	9	1		64.6	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111 THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	5/5/91	10	1		64	N	
1	5/5/91	11	1		63.9	N	
1	5/5/91	12	1		63.4	N	
1	5/12/91	1	1		67.9	Y	J
1	5/12/91	2	1		67.3	N	
1	5/12/91	3	1		65.9	N	
1	5/12/91	4	1		64.3	N	
1	5/12/91	5	1		63.7	N	
1	5/12/91	6	1		63.9	N	
1	5/12/91	7	1		63.8	N	
1	5/12/91	8	1		63.9	N	
1	5/12/91	9	1		64.5	N	
1	5/12/91	10	1		63.8	N	
1	5/12/91	11	1		63.7	N	
1	5/12/91	12	1		63.3	N	
1	5/18/91	1	1		69.3	Y	J Keithley 872 2E-OP-020
1	5/18/91	2	1		68.5	N	
1	5/18/91	3	1		67.2	N	
1	5/18/91	4	1		66	N	
1	5/18/91	5	1		66.8	N	
1	5/18/91	6	1		66.2	N	
1	5/18/91	7	1		65.9	N	
1	5/18/91	8	1		66.2	N	
1	5/18/91	9	1		66.6	N	
1	5/18/91	10	1		66	N	
1	5/18/91	11	1		64.9	N	
1	5/18/91	12	1		64.5	N	
1	5/25/91	1	1		68.5	Y	J 2E-OP-021
1	5/25/91	2	1		67.9	N	
1	5/25/91	3	1		66.6	N	
1	5/25/91	4	1		65.1	N	
1	5/25/91	5	1		64.7	N	
1	5/25/91	6	1		64.8	N	
1	5/25/91	7	1		64.8	N	
1	5/25/91	8	1		64.8	N	
1	5/25/91	9	1		65.3	N	
1	5/25/91	10	1		64.6	N	
1	5/25/91	11	1		64.6	N	
1	5/25/91	12	1		64.2	N	
1	6/1/91	1	1		66.3	Y	J 890423320-42
1	6/1/91	2	1		66	N	
1	6/1/91	3	1		64.9	N	
1	6/1/91	4	1		63.6	N	
1	6/1/91	5	1		63.2	N	
1	6/1/91	6	1		63.2	N	
1	6/1/91	7	1		63.2	N	
1	6/1/91	8	1		63.2	N	
1	6/1/91	9	1		63.2	N	
1	6/1/91	10	1		63.1	N	
1	6/1/91	11	1		63	N	
1	6/1/91	12	1		62.6	N	
1	6/8/91	1	1		65.9	Y	J 890523512-20
1	6/8/91	2	1		65.7	N	
1	6/8/91	3	1		64.7	N	
1	6/8/91	4	1		63.5	N	
1	6/8/91	5	1		63.4	N	
1	6/8/91	6	1		63.6	N	
1	6/8/91	7	1		63.7	N	
1	6/8/91	8	1		63.7	N	
1	6/8/91	9	1		64.4	N	
1	6/8/91	10	1		63.5	N	
1	6/8/91	11	1		63.2	N	
1	6/8/91	12	1		62.6	N	
1	6/15/91	1	1		67.5	Y	J 2E-OP-021
1	6/15/91	2	1		67.4	N	
1	6/15/91	3	1		66.5	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	6/15/91	4	1		65.5	N	
1	6/15/91	5	1		65.3	N	
1	6/15/91	6	1		65.4	N	
1	6/15/91	7	1		65.6	N	
1	6/15/91	8	1		65.8	N	
1	6/15/91	9	1		66.4	N	
1	6/15/91	10	1		65.7	N	
1	6/15/91	11	1		65.6	N	
1	6/15/91	12	1		65.1	N	
1	6/23/91	1	1		68.2	N	J 2E-OP-021
1	6/23/91	2	1		67.9	Y	
1	6/23/91	3	1		67.1	N	
1	6/23/91	4	1		66.2	N	
1	6/23/91	5	1		66.1	N	
1	6/23/91	6	1		66.3	N	
1	6/23/91	7	1		66.5	N	
1	6/23/91	8	1		66.6	N	
1	6/23/91	9	1		67.2	N	
1	6/23/91	10	1		66.5	N	
1	6/23/91	11	1		66.4	N	
1	6/23/91	12	1		66.1	N	
1	6/29/91	1	1		66.3	Y	J 890423320-42
1	6/29/91	2	1		66.1	N	
1	6/29/91	3	1		65.4	N	
1	6/29/91	4	1		64.6	N	
1	6/29/91	5	1		64.4	N	
1	6/29/91	6	1		64.4	N	
1	6/29/91	7	1		64.4	N	
1	6/29/91	8	1		61.7	N	
1	6/29/91	9	1		62	N	
1	6/29/91	10	1		61.7	N	
1	6/29/91	11	1		61.7	N	
1	6/29/91	12	1		61.5	N	
1	7/6/91	1	1		66.7	Y	J 910126143-42
1	7/6/91	2	1		66.6	N	
1	7/6/91	3	1		65.9	N	
1	7/6/91	4	1		65.2	N	
1	7/6/91	5	1		65	N	
1	7/6/91	6	1		65.1	N	
1	7/6/91	7	1		65.1	N	
1	7/6/91	8	1		65.1	N	
1	7/6/91	9	1		65.7	N	
1	7/6/91	10	1		64.9	N	
1	7/6/91	11	1		64.9	N	
1	7/6/91	12	1		64.6	N	
1	7/13/91	1	1		66.7	Y	J 910126143-42
1	7/13/91	2	1		66.5	N	
1	7/13/91	3	1		66	N	
1	7/13/91	4	1		65.2	N	
1	7/13/91	5	1		65	N	
1	7/13/91	6	1		65.1	N	
1	7/13/91	7	1		65	N	
1	7/13/91	8	1		65.1	N	
1	7/13/91	9	1		65.7	N	
1	7/13/91	10	1		64.9	N	
1	7/13/91	11	1		64.9	N	
1	7/13/91	12	1		64.9	N	
1	7/20/91	1	1		64.8	N	J 910126143-64
1	7/20/91	2	1		65	N	
1	7/20/91	3	1		64.7	N	
1	7/20/91	4	1		64.4	N	
1	7/20/91	5	1		64.4	N	
1	7/20/91	6	1		64.6	N	
1	7/20/91	7	1		64.7	N	
1	7/20/91	8	1		64.7	N	
1	7/20/91	9	1		65.3	Y	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	7/20/91	10	1		64.7	N	
1	7/20/91	11	1		64.6	N	
1	7/20/91	12	1		64.2	N	
1	7/27/91	1	1		65.8	N	J 910126143-14
1	7/27/91	2	1		65.9	Y	
1	7/27/91	3	1		65.6	N	
1	7/27/91	4	1		65.4	N	
1	7/27/91	5	1		65.4	N	
1	7/27/91	6	1		65.5	N	
1	7/27/91	7	1		65.6	N	
1	7/27/91	8	1		65.6	N	
1	7/27/91	9	1		65.7	N	
1	7/27/91	10	1		65.5	N	
1	7/27/91	11	1		65.4	N	
1	7/27/91	12	1		65.2	N	
1	7/31/91	1	1		66.7	N	
1	7/31/91	2	1		66.5	N	
1	7/31/91	3	1		66	N	
1	7/31/91	4	1		65.2	N	
1	7/31/91	5	1		65	N	
1	7/31/91	6	1		65.1	N	
1	7/31/91	7	1		65	N	
1	7/31/91	8	1		65.1	N	
1	7/31/91	9	1		65.7	N	
1	7/31/91	10	1		64.9	N	
1	7/31/91	11	1		64.9	N	
1	7/31/91	12	1		64.5	N	
1	8/3/91	1	1		65.1	N	J 910126143-14
1	8/3/91	2	1		65.6	N	
1	8/3/91	3	1		65.1	N	
1	8/3/91	4	1		65.2	N	
1	8/3/91	5	1		65.2	N	
1	8/3/91	6	1		65.5	N	
1	8/3/91	7	1		65.5	N	
1	8/3/91	8	1		65.5	N	
1	8/3/91	9	1		66.5	Y	
1	8/3/91	10	1		65.4	N	
1	8/3/91	11	1		65.1	N	
1	8/3/91	12	1		65	N	
1	8/10/91	1	1		68	Y	J 890523512-20
1	8/10/91	2	1		68	N	
1	8/10/91	3	1		68	N	
1	8/10/91	4	1		67	N	
1	8/10/91	5	1		67	N	
1	8/10/91	6	1		67	N	
1	8/10/91	7	1		67	N	
1	8/10/91	8	1		67	N	
1	8/10/91	9	1		67	N	
1	8/10/91	10	1		67	N	
1	8/10/91	11	1		67	N	
1	8/10/91	12	1		67	N	
1	8/18/91	1	1		66.7	N	J 890523512-20
1	8/18/91	2	1		67.1	N	
1	8/18/91	3	1		67	N	
1	8/18/91	4	1		67.2	N	
1	8/18/91	5	1		67.3	N	
1	8/18/91	6	1		67.4	N	
1	8/18/91	7	1		67.5	N	
1	8/18/91	8	1		67.5	N	
1	8/18/91	9	1		68	Y	
1	8/18/91	10	1		67.3	N	
1	8/18/91	11	1		67.3	N	
1	8/18/91	12	1		67.2	N	
1	8/24/91	1	1		68	N	J 890523512-2
1	8/24/91	2	1		68.1	N	
1	8/24/91	3	1		68.1	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	8/24/91	4	1		68.1	N	
1	8/24/91	5	1		68.3	N	
1	8/24/91	6	1		68.4	N	
1	8/24/91	7	1		68.4	N	
1	8/24/91	8	1		68.4	N	
1	8/24/91	9	1		68.4	N	
1	8/24/91	10	1		68.9	Y	
1	8/24/91	11	1		68.3	N	
1	8/24/91	12	1		68.3	N	
1	8/31/91	1	1		66.8	N	J-890423320-42
1	8/31/91	2	1		67.3	N	
1	8/31/91	3	1		67.4	N	
1	8/31/91	4	1		67.8	N	
1	8/31/91	5	1		68	N	
1	8/31/91	6	1		68.1	N	
1	8/31/91	7	1		68.1	N	
1	8/31/91	8	1		68.1	N	
1	8/31/91	9	1		68.7	Y	
1	8/31/91	10	1		68	N	
1	8/31/91	11	1		67.9	N	
1	8/31/91	12	1		67.9	N	
1	9/8/91	1	1		70.1	N	J-890423320-42
1	9/8/91	2	1		70.8	N	
1	9/8/91	3	1		71.4	N	
1	9/8/91	4	1		71.7	N	
1	9/8/91	5	1		71.7	N	
1	9/8/91	6	1		71.9	N	
1	9/8/91	7	1		72	N	
1	9/8/91	8	1		72.1	N	
1	9/8/91	9	1		72.8	Y	
1	9/8/91	10	1		72.2	N	
1	9/8/91	11	1		72.8	N	
1	9/8/91	12	1		72.3	N	
1	9/8/91	13	1		72.3	N	
1	9/15/91	1	1		66.7	N	J-910126143-75
1	9/15/91	2	1		67.4	N	
1	9/15/91	3	1		67.9	N	
1	9/15/91	4	1		68.5	N	
1	9/15/91	5	1		68.9	N	
1	9/15/91	6	1		69	N	
1	9/15/91	7	1		69.2	N	
1	9/15/91	8	1		69.2	N	
1	9/15/91	9	1		69.9	Y	
1	9/15/91	10	1		69.1	N	
1	9/15/91	11	1		69.1	N	
1	9/15/91	12	1		69.1	N	
1	9/21/91	1	1		67	N	J-910126143-75
1	9/21/91	2	1		67.8	N	
1	9/21/91	3	1		68.2	N	
1	9/21/91	4	1		69.1	N	
1	9/21/91	5	1		69.8	N	
1	9/21/91	6	1		69.8	N	
1	9/21/91	7	1		70	N	
1	9/21/91	8	1		70.1	N	
1	9/21/91	9	1		70.5	Y	
1	9/21/91	10	1		70.1	N	
1	9/21/91	11	1		70	N	
1	9/21/91	12	1		70	N	
1	9/28/91	1	1		69.1	N	J-KEITHLEY 872 #T1-059
1	9/28/91	2	1		69.6	N	
1	9/28/91	3	1		69.4	N	
1	9/28/91	4	1		70.6	N	
1	9/28/91	5	1		70.2	N	
1	9/28/91	6	1		70.5	N	
1	9/28/91	7	1		70.5	N	
1	9/28/91	8	1		70.6	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	9/28/91	9	1		71.3	Y	
1	9/28/91	10	1		70.8	N	
1	9/28/91	11	1		70.9	N	
1	9/28/91	12	1		70.7	N	
1	10/5/91	1	1		68.3	N	J-910126143-42
1	10/5/91	2	1		68.9	N	
1	10/5/91	3	1		69.4	N	
1	10/5/91	4	1		70	N	
1	10/5/91	5	1		70.3	N	
1	10/5/91	6	1		70.3	N	
1	10/5/91	7	1		70.3	N	
1	10/5/91	8	1		70.4	N	
1	10/5/91	9	1		71.1	N	
1	10/5/91	10	1		70.4	N	
1	10/5/91	11	1		70.4	N	
1	10/5/91	12	1		70.5	Y	
1	10/12/91	1	1		67.5	N	J-TI023
1	10/12/91	2	1		68	N	
1	10/12/91	3	1		68.5	N	
1	10/12/91	4	1		69.2	N	
1	10/12/91	5	1		69.4	N	
1	10/12/91	6	1		69.4	N	
1	10/12/91	7	1		69.4	N	
1	10/12/91	8	1		69.3	N	
1	10/12/91	9	1		70	Y	
1	10/12/91	10	1		69.4	N	
1	10/12/91	11	1		69.4	N	
1	10/12/91	12	1		69.6	N	
1	10/19/91	1	1		67.6	N	J-890523512-47
1	10/19/91	2	1		68.1	N	
1	10/19/91	3	1		68.7	N	
1	10/19/91	4	1		69.4	N	
1	10/19/91	5	1		69.6	N	
1	10/19/91	6	1		69.8	N	
1	10/19/91	7	1		69.9	N	
1	10/19/91	8	1		70	N	
1	10/19/91	9	1		70.6	Y	
1	10/19/91	10	1		70.1	N	
1	10/19/91	11	1		70.1	N	
1	10/19/91	12	1		70.2	N	
1	10/27/91	1	1		69.3	N	J-9101126143-42
1	10/27/91	2	1		70.1	N	
1	10/27/91	3	1		70.6	N	
1	10/27/91	4	1		71.1	N	
1	10/27/91	5	1		71.2	N	
1	10/27/91	6	1		71.2	N	
1	10/27/91	7	1		71.2	N	
1	10/27/91	8	1		71.2	N	
1	10/27/91	9	1		71.5	N	
1	10/27/91	10	1		71.3	N	
1	10/27/91	11	1		71.4	N	
1	10/27/91	12	1		71.5	N	
1	11/2/91	1	1		67	N	J-890523512-47
1	11/2/91	2	1		68	N	
1	11/2/91	3	1		68	N	
1	11/2/91	4	1		68	N	
1	11/2/91	5	1		68	N	
1	11/2/91	6	1		68	N	
1	11/2/91	7	1		68	N	
1	11/2/91	8	1		68	N	
1	11/2/91	9	1		68	N	
1	11/2/91	10	1		68	N	
1	11/2/91	11	1		68	N	
1	11/2/91	12	1		69	Y	
1	11/9/91	1	1		67	N	J-890523512-47
1	11/9/91	2	1		68	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	11/9/91	3	1		69	Y	
1	11/9/91	4	1		69	N	
1	11/9/91	5	1		69	N	
1	11/9/91	6	1		69	N	
1	11/9/91	7	1		69	N	
1	11/9/91	8	1		69	N	
1	11/9/91	9	1		69	N	
1	11/9/91	10	1		69	N	
1	11/9/91	11	1		69	N	
1	11/9/91	12	1		69	N	
1	11/17/91	1	1		68.1	N	J-910126143-75
1	11/17/91	2	1		68.9	N	
1	11/17/91	3	1		69.3	N	
1	11/17/91	4	1		69.2	N	
1	11/17/91	5	1		69.1	N	
1	11/17/91	6	1		69.1	N	
1	11/17/91	7	1		69.2	N	
1	11/17/91	8	1		69.2	N	
1	11/17/91	9	1		69.4	Y	
1	11/17/91	10	1		69.2	N	
1	11/17/91	11	1		69.2	N	
1	11/17/91	12	1		69.3	N	
1	11/24/91	1	1		68.8	N	J-910126143-75
1	11/24/91	2	1		69.4	N	
1	11/24/91	3	1		69.6	Y	
1	11/24/91	4	1		69.4	N	
1	11/24/91	5	1		69.1	N	
1	11/24/91	6	1		69.1	N	
1	11/24/91	7	1		69.1	N	
1	11/24/91	8	1		69.1	N	
1	11/24/91	9	1		69.3	N	
1	11/24/91	10	1		69.2	N	
1	11/24/91	11	1		69.2	N	
1	11/24/91	12	1		69.3	N	
1	12/1/91	1	1		69.1	N	J-910126143-14
1	12/1/91	2	1		69.7	N	
1	12/1/91	3	1		69.9	Y	
1	12/1/91	4	1		69.4	N	
1	12/1/91	5	1		69.7	N	
1	12/1/91	6	1		69.1	N	
1	12/1/91	7	1		69	N	
1	12/1/91	8	1		69.1	N	
1	12/1/91	9	1		69.1	N	
1	12/1/91	10	1		67.2	N	
1	12/1/91	11	1		66.5	N	
1	12/1/91	12	1		68.9	N	
1	12/6/91	1	1		70.1	N	J-910126143-29
1	12/6/91	2	1		70.6	Y	
1	12/6/91	3	1		70.6	N	
1	12/6/91	4	1		70	N	
1	12/6/91	5	1		69.6	N	
1	12/6/91	6	1		69.6	N	
1	12/6/91	7	1		69.7	N	
1	12/6/91	8	1		69.7	N	
1	12/6/91	9	1		69.7	N	
1	12/6/91	10	1		69.6	N	
1	12/6/91	11	1		69.6	N	
1	12/6/91	12	1		69.6	N	
1	12/14/91	1	1		69.8	N	J-910126143-29
1	12/14/91	2	1		70.5	Y	
1	12/14/91	3	1		70.4	N	
1	12/14/91	4	1		69.5	N	
1	12/14/91	5	1		69.1	N	
1	12/14/91	6	1		68.9	N	
1	12/14/91	7	1		68.9	N	
1	12/14/91	8	1		68.8	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111 THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	12/14/91	9	1		68.8	N	
1	12/14/91	10	1		68.8	N	
1	12/14/91	11	1		68.8	N	
1	12/14/91	12	1		68.7	N	
1	12/20/91	1	1		70.5	N	J-910126143-29
1	12/20/91	2	1		70.7	Y	
1	12/20/91	3	1		70.6	N	
1	12/20/91	4	1		69.5	N	
1	12/20/91	5	1		69.1	N	
1	12/20/91	6	1		68.9	N	
1	12/20/91	7	1		68.9	N	
1	12/20/91	8	1		68.7	N	
1	12/20/91	9	1		68.8	N	
1	12/20/91	10	1		68.9	N	
1	12/20/91	11	1		68.9	N	
1	12/20/91	12	1		68.7	N	
1	12/29/91	1	1		69.9	N	J-910126143-29
1	12/29/91	2	1		70.4	Y	
1	12/29/91	3	1		70.1	N	
1	12/29/91	4	1		68.8	N	
1	12/29/91	5	1		68.3	N	
1	12/29/91	6	1		68.2	N	
1	12/29/91	7	1		68.3	N	
1	12/29/91	8	1		68.3	N	
1	12/29/91	9	1		68.3	N	
1	12/29/91	10	1		68.2	N	
1	12/29/91	11	1		68.2	N	
1	12/29/91	12	1		68	N	
1	1/4/92	1	1		69.1	N	J-910126143-50
1	1/4/92	2	1		69.7	Y	
1	1/4/92	3	1		69.2	N	
1	1/4/92	4	1		67.7	N	
1	1/4/92	5	1		66.6	N	
1	1/4/92	6	1		66.5	N	
1	1/4/92	7	1		66.5	N	
1	1/4/92	8	1		66.5	N	
1	1/4/92	9	1		66.5	N	
1	1/4/92	10	1		66.5	N	
1	1/4/92	11	1		66.1	N	
1	1/4/92	12	1		66.2	N	
1	1/11/92	1	1		68.8	N	
1	1/11/92	2	1		69.1	Y	
1	1/11/92	3	1		68.4	N	
1	1/11/92	4	1		66.9	N	
1	1/11/92	5	1		66.3	N	
1	1/11/92	6	1		66.2	N	
1	1/11/92	7	1		66.1	N	
1	1/11/92	8	1		66.1	N	
1	1/11/92	9	1		66.1	N	
1	1/11/92	10	1		66	N	
1	1/11/92	11	1		66	N	
1	1/11/92	12	1		65.7	N	
1	1/16/92	1	1		69.5	N	J 910126143-32
1	1/16/92	2	1		69.7	Y	
1	1/16/92	3	1		68.8	N	
1	1/16/92	4	1		67.6	N	
1	1/16/92	5	1		66.9	N	
1	1/16/92	6	1		67.1	N	
1	1/16/92	7	1		67	N	
1	1/16/92	8	1		67	N	
1	1/16/92	9	1		67	N	
1	1/16/92	10	1		66.9	N	
1	1/16/92	11	1		66.8	N	
1	1/16/92	12	1		66.5	N	
1	1/25/92	1	1		68.3	N	J-910126143-14
1	1/25/92	2	1		68.4	Y	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111 THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	1/25/92	3	1		67.7	N	
1	1/25/92	4	1		65.9	N	
1	1/25/92	5	1		64.3	N	
1	1/25/92	6	1		65	N	
1	1/25/92	7	1		65	N	
1	1/25/92	8	1		65	N	
1	1/25/92	9	1		65	N	
1	1/25/92	10	1		65.2	N	
1	1/25/92	11	1		65.1	N	
1	1/25/92	12	1		64.7	N	
1	1/28/92	1	1			N	ACCESS RESTRICTED 1/28 - 2/22 DUE TO BATTERY FUME INCIDENT
1	2/24/92	1	1		69.7	Y	J-900925741-79
1	2/24/92	2	1		69.1	N	
1	2/24/92	3	1		67.8	N	
1	2/24/92	4	1		65.8	N	
1	2/24/92	5	1		64.9	N	
1	2/24/92	6	1		64.9	N	
1	2/24/92	7	1		64.9	N	
1	2/24/92	8	1		64.9	N	
1	2/24/92	9	1		65	N	
1	2/24/92	10	1		65	N	
1	2/24/92	11	1		65.1	N	
1	2/24/92	12	1		64.8	N	
1	2/29/92	1	1		69.3	N	J+I-038/9101261H332
1	2/29/92	2	1		69.1	Y	
1	2/29/92	3	1		67.8	N	
1	2/29/92	4	1		65.8	N	
1	2/29/92	5	1		65.3	N	
1	2/29/92	6	1		65.3	N	
1	2/29/92	7	1		65.7	N	
1	2/29/92	8	1		65	N	
1	2/29/92	9	1		59.5	N	
1	2/29/92	10	1		67.3	N	
1	2/29/92	11	1		68.8	N	
1	3/8/92	1	1		68.4	Y	J 910126143-48
1	3/8/92	2	1		68	N	
1	3/8/92	3	1		66.7	N	
1	3/8/92	4	1		64.9	N	
1	3/8/92	5	1		64.2	N	
1	3/8/92	6	1		64.2	N	
1	3/8/92	7	1		64.2	N	
1	3/8/92	8	1		64.2	N	
1	3/8/92	9	1		64.3	N	
1	3/8/92	10	1		64.3	N	
1	3/8/92	11	1		63.8	N	
1	3/8/92	12	1		63.4	N	
1	3/14/92	1	1		67.9	Y	J 91012643-32 TC #3,11 O/S
1	3/14/92	2	1		67.8	N	
1	3/14/92	4	1		64.5	N	
1	3/14/92	5	1		63.6	N	
1	3/14/92	6	1		63.7	N	
1	3/14/92	7	1		64.1	N	
1	3/14/92	8	1		63.8	N	
1	3/14/92	9	1		64.1	N	
1	3/14/92	10	1		63.6	N	
1	3/14/92	12	1		63.3	N	
1	3/20/92	1	1		67.5	Y	J 91012614332
1	3/20/92	2	1		67	N	
1	3/20/92	3	1		65.5	N	
1	3/20/92	4	1		63.8	N	
1	3/20/92	5	1		63.3	N	
1	3/20/92	6	1		63.7	N	
1	3/20/92	7	1		63.4	N	
1	3/20/92	8	1		63.2	N	
1	3/20/92	9	1		63.9	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	3/20/92	10	1		63.4	N	
1	3/20/92	11	1		63.3	N	
1	3/20/92	12	1		62.8	N	
1	3/28/92	1	1		68.5	Y	J 910126143-66
1	3/28/92	2	1		68	N	
1	3/28/92	3	1		66.7	N	
1	3/28/92	4	1		64.9	N	
1	3/28/92	5	1		64.4	N	
1	3/28/92	6	1		64.3	N	
1	3/28/92	7	1		64.3	N	
1	3/28/92	8	1		64.2	N	
1	3/28/92	9	1		64.3	N	
1	3/28/92	10	1		64.1	N	
1	3/28/92	11	1		64	N	
1	3/28/92	12	1		63.4	N	
1	4/3/92	1	1		66.8	N	
1	4/3/92	2	1		66.1	N	
1	4/3/92	3	1		64.9	N	
1	4/3/92	4	1		63.2	N	
1	4/3/92	5	1		62.5	N	
1	4/3/92	6	1		62.5	N	
1	4/3/92	7	1		62.5	N	
1	4/3/92	8	1		62.4	N	
1	4/3/92	9	1		62.4	N	
1	4/3/92	10	1		62.4	N	
1	4/3/92	11	1		62.3	N	
1	4/3/92	12	1		61.9	N	
1	4/11/92	1	1		68	Y	J 910126143-64
1	4/11/92	2	1		67.8	N	
1	4/11/92	3	1		66.4	N	
1	4/11/92	4	1		64.7	N	
1	4/11/92	5	1		64.3	N	
1	4/11/92	6	1		64.2	N	
1	4/11/92	7	1		64.2	N	
1	4/11/92	8	1		64.1	N	
1	4/11/92	9	1		64.1	N	
1	4/11/92	10	1		64	N	
1	4/11/92	11	1		63.9	N	
1	4/11/92	12	1		63.4	N	
1	4/17/92	1	1		68.1	Y	
1	4/17/92	2	1		67.6	N	
1	4/17/92	3	1		66.3	N	
1	4/17/92	4	1		64.8	N	
1	4/17/92	5	1		64.3	N	
1	4/17/92	6	1		64.2	N	
1	4/17/92	7	1		64.2	N	
1	4/17/92	8	1		64.2	N	
1	4/17/92	9	1		64.2	N	
1	4/17/92	10	1		64.1	N	
1	4/17/92	11	1		64	N	
1	4/17/92	12	1		63.5	N	
1	4/25/92	1	1		68	Y	J 89052351220
1	4/25/92	2	1		67.7	N	
1	4/25/92	3	1		66.5	N	
1	4/25/92	4	1		65.1	N	
1	4/25/92	5	1		64.8	N	
1	4/25/92	6	1		64.9	N	
1	4/25/92	7	1		64.9	N	
1	4/25/92	8	1		64.9	N	
1	4/25/92	9	1		65	N	
1	4/25/92	10	1		64.7	N	
1	4/25/92	11	1		64.6	N	
1	4/25/92	12	1		64	N	
1	4/30/92	1	1		65.9	Y	J 890523512-47
1	4/30/92	2	1		65	N	
1	4/30/92	3	1		63.6	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	4/30/92	4	1		62.1	N	
1	4/30/92	5	1		61.8	N	
1	4/30/92	6	1		61.8	N	
1	4/30/92	7	1		61.9	N	
1	4/30/92	8	1		61.6	N	
1	4/30/92	9	1		61.6	N	
1	4/30/92	10	1		61.7	N	
1	4/30/92	11	1		61.6	N	
1	4/30/92	12	1		61.1	N	
1	5/8/92	1	1		67.2	Y	J 910126143-48
1	5/8/92	2	1		66.7	N	
1	5/8/92	3	1		65.5	N	
1	5/8/92	4	1		64.2	N	
1	5/8/92	5	1		63.8	N	
1	5/8/92	6	1		63.7	N	
1	5/8/92	7	1		63.7	N	
1	5/8/92	8	1		63.7	N	
1	5/8/92	9	1		63.8	N	
1	5/8/92	10	1		63.7	N	
1	5/8/92	11	1		63.6	N	
1	5/8/92	12	1		63.2	N	
1	5/16/92	1	1		66.9	Y	J 910126143-32
1	5/16/92	2	1		66.4	N	
1	5/16/92	3	1		65.3	N	
1	5/16/92	4	1		64	N	
1	5/16/92	5	1		63.7	N	
1	5/16/92	6	1		63.8	N	
1	5/16/92	7	1		63.7	N	
1	5/16/92	8	1		63.7	N	
1	5/16/92	9	1		63.8	N	
1	5/16/92	10	1		63.5	N	
1	5/16/92	11	1		63.5	N	
1	5/16/92	12	1		63.1	N	
1	5/24/92	1	1		65.9	Y	J 890523512-47
1	5/24/92	2	1		65.1	N	
1	5/24/92	3	1		64.3	N	
1	5/24/92	4	1		63.1	N	
1	5/24/92	5	1		62.8	N	
1	5/24/92	6	1		62.9	N	
1	5/24/92	7	1		63	N	
1	5/24/92	8	1		62	N	
1	5/24/92	9	1		63.2	N	
1	5/24/92	10	1		62.8	N	
1	5/24/92	11	1		62.6	N	
1	5/24/92	12	1		62.2	N	
1	5/28/92	1	1		64.8	Y	J 890523512-47
1	5/28/92	2	1		64.5	N	
1	5/28/92	3	1		63.5	N	
1	5/28/92	4	1		62.6	N	
1	5/28/92	5	1		62.5	N	
1	5/28/92	6	1		62.6	N	
1	5/28/92	7	1		62.7	N	
1	5/28/92	8	1		62.7	N	
1	5/28/92	9	1		63.2	N	
1	5/28/92	10	1		62.7	N	
1	5/28/92	11	1		62.6	N	
1	5/28/92	12	1		62.3	N	
1	6/5/92	1	1		65.3	Y	J 910126143-50
1	6/5/92	2	1		65.1	N	
1	6/5/92	3	1		64.1	N	
1	6/5/92	4	1		63.2	N	
1	6/5/92	5	1		63	N	
1	6/5/92	6	1		63.1	N	
1	6/5/92	7	1		62.1	N	
1	6/5/92	8	1		62.2	N	
1	6/5/92	9	1		62	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	6/5/92	10	1		62.1	N	
1	6/5/92	11	1		62.3	N	
1	6/5/92	12	1		62.4	N	
1	6/13/92	1	1		63.6	Y	J 890523512-47
1	6/13/92	2	1		63.6	N	
1	6/13/92	3	1		62.5	N	
1	6/13/92	4	1		61.9	N	
1	6/13/92	5	1		61.8	N	
1	6/13/92	6	1		61.9	N	
1	6/13/92	7	1		61.9	N	
1	6/13/92	8	1		61.9	N	
1	6/13/92	9	1		61.9	N	
1	6/13/92	10	1		61.9	N	
1	6/13/92	11	1		61.9	N	
1	6/13/92	12	1		61.5	N	
1	6/20/92	1	1		66	Y	J 910126143-48
1	6/20/92	2	1		65.8	N	
1	6/20/92	3	1		65.2	N	
1	6/20/92	4	1		64.7	N	
1	6/20/92	5	1		64.6	N	
1	6/20/92	6	1		64.6	N	
1	6/20/92	7	1		64.6	N	
1	6/20/92	8	1		64.6	N	
1	6/20/92	9	1		64.8	N	
1	6/20/92	10	1		64.5	N	
1	6/20/92	11	1		64.4	N	
1	6/20/92	12	1		64.1	N	
1	6/28/92	1	1		66.6	Y	J TI-042-910126143-66
1	6/28/92	2	1		66.5	N	
1	6/28/92	3	1		65.9	N	
1	6/28/92	4	1		65.6	N	
1	6/28/92	5	1		65.4	N	
1	6/28/92	6	1		65.5	N	
1	6/28/92	7	1		65.5	N	
1	6/28/92	8	1		65.5	N	
1	6/28/92	9	1		65.9	N	
1	6/28/92	10	1		65.5	N	
1	6/28/92	11	1		65.4	N	
1	6/28/92	12	1		64.2	N	
1	7/3/92	1	1		65.2	Y	J TI-041
1	7/3/92	2	1		65.1	N	
1	7/3/92	3	1		64.8	N	
1	7/3/92	4	1		64.5	N	
1	7/3/92	5	1		64.5	N	
1	7/3/92	6	1		64.7	N	
1	7/3/92	7	1		64.8	N	
1	7/3/92	8	1		64.9	N	
1	7/3/92	9	1		65	N	
1	7/3/92	10	1		64.7	N	
1	7/3/92	11	1		64.5	N	
1	7/3/92	12	1		64.1	N	
1	7/10/92	1	1		66.1	N	J 910126143-42
1	7/10/92	2	1		66.3	Y	
1	7/10/92	3	1		64.9	N	
1	7/10/92	4	1		65	N	
1	7/10/92	5	1		65.1	N	
1	7/10/92	6	1		65.2	N	
1	7/10/92	7	1		65.3	N	
1	7/10/92	8	1		65.4	N	
1	7/10/92	9	1		65.8	N	
1	7/10/92	10	1		65.4	N	
1	7/10/92	11	1		65.4	N	
1	7/10/92	12	1		65.2	N	
1	7/18/92	1	1		65.2	N	J 910126143-42
1	7/18/92	2	1		65	N	
1	7/18/92	3	1		64.5	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	7/18/92	4	1		64.6	N	
1	7/18/92	5	1		64.7	N	
1	7/18/92	6	1		65	N	
1	7/18/92	7	1		64.9	N	
1	7/18/92	8	1		65.2	N	
1	7/18/92	9	1		65.8	Y	
1	7/18/92	10	1		65.1	N	
1	7/18/92	11	1		65	N	
1	7/18/92	12	1		64.9	N	
1	7/24/92	1	1		64.4	N	J HH-99A 910126143-29
1	7/24/92	2	1		66.6	N	
1	7/24/92	3	1		66.5	N	
1	7/24/92	4	1		66.7	N	
1	7/24/92	5	1		67.1	N	
1	7/24/92	6	1		67.2	N	
1	7/24/92	7	1		67.3	N	
1	7/24/92	8	1		67.4	N	
1	7/24/92	9	1		67.4	Y	
1	7/24/92	10	1		67.2	N	
1	7/24/92	11	1		66.8	N	
1	7/24/92	12	1		66.4	N	
1	8/1/92	1	1		66.2	N	J TI-041
1	8/1/92	2	1		66.4	N	
1	8/1/92	3	1		66.5	N	
1	8/1/92	4	1		66.8	N	
1	8/1/92	5	1		66.8	N	
1	8/1/92	6	1		66.9	Y	
1	8/1/92	7	1		66.8	N	
1	8/1/92	8	1		66.8	N	
1	8/1/92	9	1		66.9	N	
1	8/1/92	10	1		66.7	N	
1	8/1/92	11	1		66.7	N	
1	8/1/92	12	1		66.7	N	
1	8/7/92	1	1		65.8	N	J 890423320-42
1	8/7/92	2	1		66	N	
1	8/7/92	3	1		66.1	N	
1	8/7/92	4	1		66.5	N	
1	8/7/92	5	1		66.6	N	
1	8/7/92	6	1		66.7	N	
1	8/7/92	7	1		66.8	N	
1	8/7/92	8	1		66.8	N	
1	8/7/92	9	1		67	N	
1	8/7/92	10	1		66.9	N	
1	8/7/92	11	1		66.9	N	
1	8/7/92	12	1		67.1	Y	
1	8/15/92	1	1		65.5	N	J 890423320
1	8/15/92	2	1		65.9	N	
1	8/15/92	3	1		66.1	N	
1	8/15/92	4	1		66.6	N	
1	8/15/92	5	1		66.7	N	
1	8/15/92	6	1		66.8	N	
1	8/15/92	7	1		66.8	N	
1	8/15/92	8	1		66.8	N	
1	8/15/92	9	1		66.9	Y	
1	8/15/92	10	1		66.8	N	
1	8/15/92	11	1		66.7	N	
1	8/15/92	12	1		66.8	N	
1	8/21/92	1	1		65.8	N	J 890423320-42
1	8/21/92	2	1		66.2	N	
1	8/21/92	3	1		66.6	N	
1	8/21/92	4	1		67.2	N	
1	8/21/92	5	1		67.4	N	
1	8/21/92	6	1		67.5	N	
1	8/21/92	7	1		67.5	N	
1	8/21/92	8	1		67.6	N	
1	8/21/92	9	1		67.7	Y	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	8/21/92	10	1		67.5	N	
1	8/21/92	11	1		67.5	N	
1	8/21/92	12	1		67.5	N	
1	8/30/92	1	1		65.7	N	J 890423320-42
1	8/30/92	2	1		66.3	N	
1	8/30/92	3	1		66.8	N	
1	8/30/92	4	1		67.6	N	
1	8/30/92	5	1		67.8	N	
1	8/30/92	6	1		68.9	Y	
1	8/30/92	7	1		67.9	N	
1	8/30/92	8	1		68	N	
1	8/30/92	9	1		68.6	N	
1	8/30/92	10	1		68	N	
1	8/30/92	11	1		68	N	
1	8/30/92	12	1		68	N	
1	9/6/92	1	1		65.5	N	J 890423320-42
1	9/6/92	2	1		66.5	N	
1	9/6/92	3	1		66.5	N	
1	9/6/92	4	1		67.8	N	
1	9/6/92	5	1		68	N	
1	9/6/92	6	1		68.1	N	
1	9/6/92	7	1		68.1	N	
1	9/6/92	8	1		68.1	N	
1	9/6/92	9	1		68.5	Y	
1	9/6/92	10	1		68	N	
1	9/6/92	11	1		68.2	N	
1	9/6/92	12	1		68.2	N	
1	9/12/92	1	1		67.3	N	J 890423320-42
1	9/12/92	2	1		67.9	N	
1	9/12/92	3	1		68.4	N	
1	9/12/92	4	1		69.1	N	
1	9/12/92	5	1		69.4	N	
1	9/12/92	6	1		69.5	N	
1	9/12/92	7	1		69.6	N	
1	9/12/92	8	1		69.7	N	
1	9/12/92	9	1		70	Y	
1	9/12/92	10	1		69.7	N	
1	9/12/92	11	1		69.8	N	
1	9/12/92	12	1		69.9	N	
1	9/20/92	1	1		69	N	J 910125143-64
1	9/20/92	2	1		68.6	N	
1	9/20/92	3	1		69.2	N	
1	9/20/92	4	1		70	N	
1	9/20/92	5	1		70.2	N	
1	9/20/92	6	1		70.3	N	
1	9/20/92	7	1		70.3	N	
1	9/20/92	8	1		70.3	N	
1	9/20/92	9	1		70.4	N	
1	9/20/92	10	1		70.3	N	
1	9/20/92	11	1		70.4	N	
1	9/20/92	12	1		70.5	Y	
1	9/26/92	1	1		66.4	N	J 910126143-64
1	9/26/92	2	1		67.2	N	
1	9/26/92	3	1		67.7	N	
1	9/26/92	4	1		68.5	N	
1	9/26/92	5	1		68.7	N	
1	9/26/92	6	1		68.8	N	
1	9/26/92	7	1		68.8	N	
1	9/26/92	8	1		68.8	N	
1	9/26/92	9	1		69.3	N	
1	9/26/92	10	1		68.7	N	
1	9/26/92	11	1		68.8	N	
1	9/26/92	12	1		69.1	Y	
1	10/1/92	1	1		67.2	N	J 890423320-42
1	10/1/92	2	1		67.9	N	
1	10/1/92	3	1		68.3	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	10/1/92	4	1		69.2	N	
1	10/1/92	5	1		69.4	N	
1	10/1/92	6	1		69.6	N	
1	10/1/92	7	1		69.6	N	
1	10/1/92	8	1		69.7	N	
1	10/1/92	9	1		69.9	Y	
1	10/1/92	10	1		69.4	N	
1	10/1/92	11	1		69.2	N	
1	10/1/92	12	1		69.2	N	
1	10/10/92	1	1		67.6	N	J 910126143-48
1	10/10/92	2	1		68.4	N	
1	10/10/92	3	1		69.1	N	
1	10/10/92	4	1		69.8	N	
1	10/10/92	5	1		69.9	N	
1	10/10/92	6	1		70	N	
1	10/10/92	7	1		70.1	N	
1	10/10/92	8	1		70.1	N	
1	10/10/92	9	1		70.1	N	
1	10/10/92	10	1		70.1	N	
1	10/10/92	11	1		70.1	N	
1	10/10/92	12	1		70.3	Y	
1	10/18/92	1	1		69.3	N	J 910125143-40
1	10/18/92	2	1		70.1	N	
1	10/18/92	3	1		70.7	N	
1	10/18/92	4	1		71.2	N	
1	10/18/92	5	1		71.3	N	
1	10/18/92	6	1		71.2	N	
1	10/18/92	7	1		71.4	N	
1	10/18/92	8	1		71.4	N	
1	10/18/92	9	1		71.4	N	
1	10/18/92	10	1		71.4	N	
1	10/18/92	11	1		71.4	N	
1	10/18/92	12	1		71.5	Y	
1	10/23/92	1	1		68.2	N	J 910126143-66
1	10/23/92	2	1		69.1	N	
1	10/23/92	3	1		69.6	N	
1	10/23/92	4	1		70.1	N	
1	10/23/92	5	1		70.2	N	
1	10/23/92	6	1		70.3	N	
1	10/23/92	7	1		70.3	N	
1	10/23/92	8	1		70.4	Y	
1	10/23/92	9	1		70.4	N	
1	10/23/92	10	1		70.4	N	
1	10/23/92	11	1		70.3	N	
1	10/23/92	12	1		70.4	N	
1	10/28/92	1	1		69.4	N	J 91012614366
1	10/28/92	2	1		70	N	
1	10/28/92	3	1		70.6	N	
1	10/28/92	4	1		70.6	N	
1	10/28/92	5	1		70.8	N	
1	10/28/92	6	1		70.7	N	
1	10/28/92	7	1		70.7	N	
1	10/28/92	8	1		70.7	N	
1	10/28/92	9	1		70.7	N	
1	10/28/92	10	1		70.7	N	
1	10/28/92	11	1		70.8	N	
1	10/28/92	12	1		70.9	Y	
1	11/7/92	1	1		68.7	N	J 910126143-48
1	11/7/92	2	1		69.5	N	
1	11/7/92	3	1		69.9	N	
1	11/7/92	4	1		70	N	
1	11/7/92	5	1		70	N	
1	11/7/92	6	1		70	N	
1	11/7/92	7	1		70.1	N	
1	11/7/92	8	1		70.1	N	
1	11/7/92	9	1		70.3	Y	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	11/7/92	10	1		70.1	N	
1	11/7/92	11	1		70.1	N	
1	11/7/92	12	1		70.2	N	
1	11/15/92	1	1		67.6	N	J 890423320-42
1	11/15/92	2	1		68.3	N	
1	11/15/92	3	1		68.7	Y	
1	11/15/92	4	1		68.7	N	
1	11/15/92	5	1		68.6	N	
1	11/15/92	6	1		68.5	N	
1	11/15/92	7	1		68.5	N	
1	11/15/92	8	1		68.6	N	
1	11/15/92	9	1		68.7	N	
1	11/15/92	10	1		68.6	N	
1	11/15/92	11	1		68.6	N	
1	11/15/92	12	1		68.7	N	
1	11/21/92	1	1		68.8	N	J 910126143-14
1	11/21/92	2	1		69.3	N	
1	11/21/92	4	1		69.3	N	
1	11/21/92	5	1		69.1	N	
1	11/21/92	6	1		69.1	N	
1	11/21/92	7	1		69.1	N	
1	11/21/92	8	1		69.2	N	
1	11/21/92	9	1		69.5	N	
1	11/21/92	10	1		69.5	N	
1	11/21/92	11	1		69.6	N	
1	11/21/92	12	1		69.9	Y	
1	11/27/92	1	1		70.8	N	J 890523512-20
1	11/27/92	2	1		71.5	N	
1	11/27/92	3	1		71.7	Y	
1	11/27/92	4	1		71.4	N	
1	11/27/92	5	1		71.2	N	
1	11/27/92	6	1		71.3	N	
1	11/27/92	7	1		71.4	N	
1	11/27/92	8	1		71.5	N	
1	11/27/92	9	1		71.6	N	
1	11/27/92	10	1		71.5	N	
1	11/27/92	11	1		71.5	N	
1	11/27/92	12	1		71.5	N	
1	12/5/92	1	1		68.5	N	J 890423320-42
1	12/5/92	2	1		69.1	N	
1	12/5/92	3	1		69.3	Y	
1	12/5/92	4	1		68.5	N	
1	12/5/92	5	1		68.2	N	
1	12/5/92	6	1		68.2	N	
1	12/5/92	7	1		68.2	N	
1	12/5/92	8	1		68.2	N	
1	12/5/92	9	1		68.2	N	
1	12/5/92	10	1		68.1	N	
1	12/5/92	11	1		68.1	N	
1	12/5/92	12	1		68	N	
1	12/12/92	1	1		69.8	N	J 910126143-40
1	12/12/92	2	1		70.4	Y	
1	12/12/92	4	1		69.4	N	
1	12/12/92	5	1		69.2	N	
1	12/12/92	6	1		69.2	N	
1	12/12/92	7	1		69.3	N	
1	12/12/92	8	1		69.3	N	
1	12/12/92	9	1		69.4	N	
1	12/12/92	10	1		69.3	N	
1	12/12/92	11	1		69.2	N	
1	12/12/92	12	1		69.1	N	
1	12/19/92	1	1		70.1	N	J 910126143-14
1	12/19/92	2	1		70.5	Y	
1	12/19/92	3	1		70.3	N	
1	12/19/92	4	1		69.3	N	
1	12/19/92	5	1		68.8	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	12/19/92	6	1		68.7	N	
1	12/19/92	7	1		68.8	N	
1	12/19/92	8	1		68.8	N	
1	12/19/92	9	1		68.8	N	
1	12/19/92	10	1		68.8	N	
1	12/19/92	11	1		68.8	N	
1	12/19/92	12	1		68.7	N	
1	12/25/92	1	1		70.7	N	J 890523512-20
1	12/25/92	2	1		71.2	Y	
1	12/25/92	3	1		70.8	N	
1	12/25/92	4	1		69.8	N	
1	12/25/92	5	1		69.4	N	
1	12/25/92	6	1		69.4	N	
1	12/25/92	7	1		69.4	N	
1	12/25/92	8	1		69.3	N	
1	12/25/92	9	1		69.3	N	
1	12/25/92	10	1		69.1	N	
1	12/25/92	11	1		69.1	N	
1	12/25/92	12	1		68.8	N	
1	1/1/93	1	1		69	N	J 890523512-47
1	1/1/93	2	1		70.9	Y	
1	1/1/93	3	1		67.5	N	
1	1/1/93	4	1		66.9	N	
1	1/1/93	5	1		66.7	N	
1	1/1/93	6	1		67.2	N	
1	1/1/93	7	1		66.8	N	
1	1/1/93	8	1		66.8	N	
1	1/1/93	9	1		66.7	N	
1	1/1/93	10	1		66.7	N	
1	1/1/93	11	1		66.7	N	
1	1/1/93	12	1		66.5	N	
1	1/9/93	1	1		70.3	N	J 890523512-47
1	1/9/93	2	1		70.4	Y	
1	1/9/93	4	1		68.1	N	
1	1/9/93	5	1		67.6	N	
1	1/9/93	6	1		67.5	N	
1	1/9/93	7	1		67.5	N	
1	1/9/93	8	1		67.6	N	
1	1/9/93	9	1		67.4	N	
1	1/9/93	10	1		67.6	N	
1	1/9/93	11	1		67.6	N	
1	1/9/93	12	1		67.4	N	
1	1/18/93	1	1		69.9	N	J TI-042
1	1/18/93	2	1		70	Y	
1	1/18/93	3	1		68.9	N	
1	1/18/93	4	1		67.2	N	
1	1/18/93	5	1		66.7	N	
1	1/18/93	6	1		66.7	N	
1	1/18/93	7	1		61.6	N	
1	1/18/93	8	1		66.6	N	
1	1/18/93	9	1		66.6	N	
1	1/18/93	10	1		66.6	N	
1	1/18/93	11	1		66.7	N	
1	1/18/93	12	1		66.4	N	
1	1/23/93	1	1		71.8	Y	J 890523512-20
1	1/23/93	2	1		71.7	N	
1	1/23/93	3	1		70.7	N	
1	1/23/93	4	1		68.8	N	
1	1/23/93	5	1		68	N	
1	1/23/93	6	1		67.9	N	
1	1/23/93	7	1		67.9	N	
1	1/23/93	8	1		67.9	N	
1	1/23/93	9	1		67.9	N	
1	1/23/93	10	1		68	N	
1	1/23/93	11	1		68	N	
1	1/23/93	12	1		67.8	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	1/31/93	1	1		69.4	Y	J 910126143-40
1	1/31/93	2	1		69.4	N	
1	1/31/93	3	1		68.3	N	
1	1/31/93	4	1		66.3	N	
1	1/31/93	5	1		65.6	N	
1	1/31/93	6	1		65.6	N	
1	1/31/93	7	1		65.6	N	
1	1/31/93	8	1		65.4	N	
1	1/31/93	9	1		65.5	N	
1	1/31/93	10	1		65.4	N	
1	1/31/93	11	1		65.3	N	
1	1/31/93	12	1		64.9	N	
1	2/5/93	1	1		69.5	Y	J 910126143-50
1	2/5/93	2	1		69.4	N	
1	2/5/93	3	1		68.2	N	
1	2/5/93	4	1		66.2	N	
1	2/5/93	5	1		65.5	N	
1	2/5/93	6	1		65.4	N	
1	2/5/93	7	1		65.4	N	
1	2/5/93	8	1		65.3	N	
1	2/5/93	9	1		65.4	N	
1	2/5/93	10	1		65.3	N	
1	2/5/93	11	1		65.1	N	
1	2/5/93	12	1		64.7	N	
1	2/12/93	1	1		66.8	Y	J 890423320-42
1	2/12/93	2	1		66.6	N	
1	2/12/93	3	1		65.4	N	
1	2/12/93	4	1		63.4	N	
1	2/12/93	5	1		62.7	N	
1	2/12/93	6	1		62.7	N	
1	2/12/93	7	1		64.4	N	
1	2/12/93	8	1		62.7	N	
1	2/12/93	9	1		62.6	N	
1	2/12/93	10	1		62.5	N	
1	2/12/93	11	1		62.4	N	
1	2/12/93	12	1		61.9	N	
1	2/18/93	1	1		69.2	Y	J TI-040
1	2/18/93	2	1		68.9	N	
1	2/18/93	4	1		65.1	N	
1	2/18/93	5	1		64.6	N	
1	2/18/93	6	1		64.5	N	
1	2/18/93	8	1		64.3	N	
1	2/18/93	9	1		64.3	N	
1	2/18/93	10	1		64.3	N	
1	2/18/93	11	1		64.2	N	
1	2/18/93	12	1		63.7	N	
1	2/26/93	1	1		71	Y	J 900925741-79
1	2/26/93	2	1		71	N	
1	2/26/93	3	1		69	N	
1	2/26/93	4	1		67	N	
1	2/26/93	5	1		66	N	
1	2/26/93	6	1		66	N	
1	2/26/93	7	1		66	N	
1	2/26/93	8	1		66	N	
1	2/26/93	9	1		66	N	
1	2/26/93	10	1		66	N	
1	2/26/93	12	1		65	N	
1	3/5/93	1	1		66.1	Y	J 900925741-79
1	3/5/93	2	1		65.7	N	
1	3/5/93	3	1		64.1	N	
1	3/5/93	4	1		62	N	
1	3/5/93	5	1		61.3	N	
1	3/5/93	6	1		61.4	N	
1	3/5/93	7	1		61.4	N	
1	3/5/93	8	1		61.3	N	
1	3/5/93	9	1		61.6	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	3/5/93	10	1		61.3	N	
1	3/5/93	11	1		61.3	N	
1	3/5/93	12	1		60.7	N	
1	3/11/93	1	1		66.5	Y	J 890423320-42
1	3/11/93	2	1		65.9	N	
1	3/11/93	3	1		64.4	N	
1	3/11/93	4	1		62.2	N	
1	3/11/93	5	1		61.4	N	
1	3/11/93	6	1		61.4	N	
1	3/11/93	7	1		61.3	N	
1	3/11/93	8	1		61.3	N	
1	3/11/93	9	1		61.4	N	
1	3/11/93	10	1		61.2	N	
1	3/11/93	11	1		61.1	N	
1	3/11/93	12	1		60.5	N	
1	3/19/93	1	1		67.3	Y	J 910126143-14
1	3/19/93	2	1		66.6	N	
1	3/19/93	3	1		65	N	
1	3/19/93	4	1		62.8	N	
1	3/19/93	5	1		62	N	
1	3/19/93	6	1		62	N	
1	3/19/93	7	1		61.9	N	
1	3/19/93	8	1		61.9	N	
1	3/19/93	9	1		62	N	
1	3/19/93	10	1		61.7	N	
1	3/19/93	11	1		61.6	N	
1	3/19/93	12	1		61	N	
1	3/27/93	1	1		68.3	Y	J 910126143-32
1	3/27/93	2	1		67.7	N	
1	3/27/93	3	1		65.9	N	
1	3/27/93	4	1		63.7	N	
1	3/27/93	5	1		62.9	N	
1	3/27/93	6	1		62.7	N	
1	3/27/93	7	1		62.7	N	
1	3/27/93	8	1		62.7	N	
1	3/27/93	9	1		62.7	N	
1	3/27/93	10	1		62.5	N	
1	3/27/93	11	1		62.4	N	
1	3/27/93	12	1		61.7	N	
1	4/2/93	1	1		67.7	Y	J 910126143-32
1	4/2/93	2	1		66.9	N	
1	4/2/93	3	1		65.2	N	
1	4/2/93	4	1		63	N	
1	4/2/93	5	1		62.3	N	
1	4/2/93	6	1		62.3	N	
1	4/2/93	7	1		62.3	N	
1	4/2/93	8	1		62.3	N	
1	4/2/93	9	1		62.3	N	
1	4/2/93	10	1		62.3	N	
1	4/2/93	11	1		62	N	
1	4/2/93	12	1		61.4	N	
1	4/9/93	1	1		67.7	Y	J 910126143-50
1	4/9/93	2	1		67	N	
1	4/9/93	3	1		65.2	N	
1	4/9/93	4	1		63	N	
1	4/9/93	5	1		62.3	N	
1	4/9/93	6	1		62.3	N	
1	4/9/93	7	1		62.2	N	
1	4/9/93	8	1		62.2	N	
1	4/9/93	9	1		62.7	N	
1	4/9/93	10	1		62.1	N	
1	4/9/93	11	1		62	N	
1	4/9/93	12	1		61.6	N	
1	4/17/93	1	1		67.6	Y	TYPE J 910126143-64
1	4/17/93	2	1		66.8	N	
1	4/17/93	3	1		65.1	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	4/17/93	4	1		63.1	N	
1	4/17/93	5	1		62.4	N	
1	4/17/93	6	1		62.5	N	
1	4/17/93	7	1		62.4	N	
1	4/17/93	8	1		62.4	N	
1	4/17/93	9	1		62.9	N	
1	4/17/93	10	1		62.2	N	
1	4/17/93	11	1		62.1	N	
1	4/17/93	12	1		61.6	N	
1	4/24/93	1	1		67.3	Y	J 910126143-50
1	4/24/93	2	1		66.4	N	
1	4/24/93	3	1		65.9	N	
1	4/24/93	4	1		62.8	N	
1	4/24/93	5	1		62	N	
1	4/24/93	6	1		62	N	
1	4/24/93	7	1		62	N	
1	4/24/93	8	1		62	N	
1	4/24/93	9	1		62.5	N	
1	4/24/93	10	1		61.9	N	
1	4/24/93	11	1		61.9	N	
1	4/24/93	12	1		61.4	N	
1	5/1/93	1	1		66.7	Y	J 910126143-50
1	5/1/93	2	1		65.9	N	
1	5/1/93	3	1		64.4	N	
1	5/1/93	4	1		62.5	N	
1	5/1/93	5	1		62	N	
1	5/1/93	6	1		61.9	N	
1	5/1/93	7	1		62	N	
1	5/1/93	8	1		62	N	
1	5/1/93	9	1		62.4	N	
1	5/1/93	10	1		61.8	N	
1	5/1/93	11	1		61.6	N	
1	5/1/93	12	1		60.9	N	
1	5/8/93	1	1		66.6	Y	J 910126143-50
1	5/8/93	2	1		65.8	N	
1	5/8/93	3	1		64.4	N	
1	5/8/93	4	1		58.7	N	
1	5/8/93	5	1		62	N	
1	5/8/93	6	1		62	N	
1	5/8/93	7	1		61.9	N	
1	5/8/93	8	1		61.9	N	
1	5/8/93	9	1		62.3	N	
1	5/8/93	10	1		61.9	N	
1	5/8/93	11	1		61.8	N	
1	5/8/93	12	1		61.3	N	
1	5/13/93	1	1		64.8	Y	J910126143-50
1	5/13/93	2	1		64.3	N	
1	5/13/93	3	1		62.6	N	
1	5/13/93	4	1		61.1	N	
1	5/13/93	5	1		60.6	N	
1	5/13/93	6	1		60.7	N	
1	5/13/93	7	1		60.6	N	
1	5/13/93	8	1		60.5	N	
1	5/13/93	9	1		61.5	N	
1	5/13/93	10	1		60.3	N	
1	5/13/93	11	1		60.2	N	
1	5/13/93	12	1		59.7	N	
1	5/22/93	1	1		66.8	Y	J 910126143-64
1	5/22/93	2	1		66	N	
1	5/22/93	3	1		64.6	N	
1	5/22/93	4	1		63.1	N	
1	5/22/93	5	1		62.8	N	
1	5/22/93	6	1		62.7	N	
1	5/22/93	7	1		62.8	N	
1	5/22/93	8	1		62.5	N	
1	5/22/93	9	1		63	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	5/22/93	10	1		62.9	N	
1	5/22/93	11	1		62.3	N	
1	5/22/93	12	1		61.9	N	
1	5/29/93	1	1		66	Y	J 910126143-32
1	5/29/93	2	1		65.3	N	
1	5/29/93	3	1		64	N	
1	5/29/93	4	1		62.6	N	
1	5/29/93	5	1		62.6	N	
1	5/29/93	6	1		62.1	N	
1	5/29/93	7	1		62.1	N	
1	5/29/93	8	1		62	N	
1	5/29/93	9	1		62.5	N	
1	5/29/93	10	1		61.9	N	
1	5/29/93	11	1		61.8	N	
1	5/29/93	12	1		61.3	N	
1	6/3/93	1	1		65.6	Y	J TI-040
1	6/3/93	2	1		65	N	
1	6/3/93	3	1		63.8	N	
1	6/3/93	4	1		62.5	N	
1	6/3/93	5	1		62.2	N	
1	6/3/93	6	1		62.2	N	
1	6/3/93	7	1		62.2	N	
1	6/3/93	8	1		62.2	N	
1	6/3/93	9	1		62.9	N	
1	6/3/93	10	1		62	N	
1	6/3/93	11	1		61.9	N	
1	6/3/93	12	1		61.5	N	
1	6/12/93	1	1		65.1	Y	J 890523512-20
1	6/12/93	2	1		64.8	N	
1	6/12/93	3	1		63.6	N	
1	6/12/93	4	1		62.8	N	
1	6/12/93	5	1		62.6	N	
1	6/12/93	6	1		62.7	N	
1	6/12/93	7	1		62.7	N	
1	6/12/93	8	1		62.7	N	
1	6/12/93	9	1		62.6	N	
1	6/12/93	10	1		62.5	N	
1	6/12/93	11	1		62.3	N	
1	6/12/93	12	1		61.9	N	
1	6/19/93	1	1		65.8	Y	J 890523512-20
1	6/19/93	2	1		65.3	N	
1	6/19/93	3	1		63.5	N	
1	6/19/93	4	1		63.4	N	
1	6/19/93	5	1		63	N	
1	6/19/93	6	1		63.1	N	
1	6/19/93	7	1		63.1	N	
1	6/19/93	8	1		63.1	N	
1	6/19/93	9	1		64	N	
1	6/19/93	10	1		62.9	N	
1	6/19/93	11	1		62.8	N	
1	6/19/93	12	1		62.5	N	
1	6/23/93	1	1		65.6	Y	J 910126143-14
1	6/23/93	2	1		65.1	N	
1	6/23/93	3	1		64.2	N	
1	6/23/93	4	1		63.2	N	
1	6/23/93	5	1		63.1	N	
1	6/23/93	6	1		63.1	N	
1	6/23/93	7	1		63.1	N	
1	6/23/93	8	1		63.1	N	
1	6/23/93	9	1		64	N	
1	6/23/93	10	1		63.1	N	
1	6/23/93	11	1		63	N	
1	6/23/93	12	1		62.7	N	
1	7/8/93	1	1		66.6	Y	J 910126143-66
1	7/8/93	2	1		66.3	N	
1	7/8/93	3	1		65.6	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	7/8/93	4	1		65.1	N	
1	7/8/93	5	1		64.9	N	
1	7/8/93	6	1		64.9	N	
1	7/8/93	7	1		64.9	N	
1	7/8/93	8	1		64.9	N	
1	7/8/93	9	1		66.1	N	
1	7/8/93	10	1		64.8	N	
1	7/8/93	11	1		64.7	N	
1	7/8/93	12	1		64.4	N	
1	7/16/93	1	1		65.7	Y	J 910125143-48
1	7/16/93	2	1		65.5	N	
1	7/16/93	3	1		65.1	N	
1	7/16/93	4	1		64.7	N	
1	7/16/93	5	1		64.6	N	
1	7/16/93	6	1		64.6	N	
1	7/16/93	7	1		64.7	N	
1	7/16/93	8	1		64.6	N	
1	7/16/93	9	1		65.5	N	
1	7/16/93	10	1		64.4	N	
1	7/16/93	11	1		64.3	N	
1	7/16/93	12	1		64.1	N	
1	7/24/93	1	1		65.2	Y	J 910126143-42
1	7/24/93	2	1		65	N	
1	7/24/93	3	1		64.6	N	
1	7/24/93	4	1		64.2	N	
1	7/24/93	5	1		64.1	N	
1	7/24/93	6	1		64.1	N	
1	7/24/93	7	1		64.2	N	
1	7/24/93	8	1		64.1	N	
1	7/24/93	9	1		65.2	N	
1	7/24/93	10	1		64	N	
1	7/24/93	11	1		63.9	N	
1	7/24/93	12	1		63.8	N	
1	7/31/93	1	1		65	N	TI-039 J 910126143-50
1	7/31/93	2	1		64.9	N	
1	7/31/93	3	1		64.6	N	
1	7/31/93	4	1		64.4	N	
1	7/31/93	5	1		64.3	N	
1	7/31/93	6	1		64.4	N	
1	7/31/93	7	1		64.4	N	
1	7/31/93	8	1		64.3	N	
1	7/31/93	9	1		65.5	Y	
1	7/31/93	10	1		64.2	N	
1	7/31/93	11	1		64.2	N	
1	7/31/93	12	1		64	N	
1	8/5/93	1	1		65.6	N	J 910126143-39
1	8/5/93	2	1		65.6	N	
1	8/5/93	3	1		65.3	N	
1	8/5/93	4	1		65.2	N	
1	8/5/93	5	1		65.1	N	
1	8/5/93	6	1		65.1	N	
1	8/5/93	7	1		65.2	N	
1	8/5/93	8	1		65.1	N	
1	8/5/93	9	1		66.3	Y	
1	8/5/93	10	1		65	N	
1	8/5/93	11	1		65	N	
1	8/5/93	12	1		64.9	N	
1	8/13/93	1	1		65.8	N	
1	8/13/93	2	1		65.6	N	
1	8/13/93	3	1		65.4	N	
1	8/13/93	4	1		65.4	N	
1	8/13/93	5	1		65.4	N	
1	8/13/93	6	1		65.4	N	
1	8/13/93	7	1		65.5	N	
1	8/13/93	8	1		65.5	N	
1	8/13/93	9	1		66.4	Y	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	8/13/93	10	1		65.3	N	
1	8/13/93	11	1		65.3	N	
1	8/13/93	12	1		65.2	N	
1	8/20/93	1	1		65.3	N	J 910126143-48
1	8/20/93	2	1		65.5	N	
1	8/20/93	3	1		65.4	N	
1	8/20/93	4	1		65.5	N	
1	8/20/93	5	1		65.5	N	
1	8/20/93	6	1		65.5	N	
1	8/20/93	7	1		65.6	N	
1	8/20/93	8	1		65.6	N	
1	8/20/93	9	1		66.6	Y	
1	8/20/93	10	1		65.5	N	
1	8/20/93	11	1		65.5	N	
1	8/20/93	12	1		65.4	N	
1	8/26/93	1	1		65.4	N	J 910126143-48
1	8/26/93	2	1		65.6	N	
1	8/26/93	3	1		65.6	N	
1	8/26/93	4	1		65.7	N	
1	8/26/93	5	1		65.7	N	
1	8/26/93	6	1		65.8	Y	
1	8/26/93	7	1		65.8	N	
1	8/26/93	8	1		65.8	N	
1	8/26/93	9	1		65.8	N	
1	8/26/93	10	1		65.8	N	
1	8/26/93	11	1		65.7	N	
1	8/26/93	12	1		65.7	N	
1	9/3/93	1	1		66	N	J 910126143-48
1	9/3/93	2	1		67	Y	
1	9/3/93	3	1		67	N	
1	9/3/93	4	1		67	N	
1	9/3/93	5	1		67	N	
1	9/3/93	6	1		67	N	
1	9/3/93	7	1		67	N	
1	9/3/93	8	1		67	N	
1	9/3/93	9	1		67	N	
1	9/3/93	10	1		67	N	
1	9/3/93	11	1		67	N	
1	9/3/93	12	1		67	N	
1	9/9/93	1	1		65.9	N	J 910126143-39
1	9/9/93	2	1		66.2	N	
1	9/9/93	3	1		66.4	N	
1	9/9/93	4	1		66.7	N	
1	9/9/93	5	1		66.7	N	
1	9/9/93	6	1		66.8	Y	
1	9/9/93	7	1		66.8	N	
1	9/9/93	8	1		66.8	N	
1	9/9/93	9	1		66.7	N	
1	9/9/93	10	1		66.8	N	
1	9/9/93	11	1		66.7	N	
1	9/9/93	12	1		66.6	N	
1	9/16/93	1	1		68	Y	J 900925741-79
1	9/16/93	2	1		68	N	
1	9/16/93	3	1		68	N	
1	9/16/93	4	1		68	N	
1	9/16/93	5	1		68	N	
1	9/16/93	6	1		68	N	
1	9/16/93	7	1		68	N	
1	9/16/93	8	1		68	N	
1	9/16/93	9	1		68	N	
1	9/16/93	10	1		68	N	
1	9/16/93	11	1		68	N	
1	9/16/93	12	1		68	N	
1	9/25/93	1	1		66.1	N	J TI-040
1	9/25/93	2	1		66.1	N	
1	9/25/93	3	1		66.1	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	9/25/93	4	1		66.5	N	
1	9/25/93	5	1		66.3	N	
1	9/25/93	6	1		66.5	N	
1	9/25/93	7	1		66.5	N	
1	9/25/93	8	1		66.7	N	
1	9/25/93	9	1		67.1	N	
1	9/25/93	10	1		67.4	N	
1	9/25/93	11	1		67.6	N	
1	9/25/93	12	1		67.9	Y	
1	9/30/93	1	1		67.1	N	J 910426540-36
1	9/30/93	2	1		67	N	
1	9/30/93	3	1		67.1	N	
1	9/30/93	4	1		67.4	N	
1	9/30/93	5	1		67	N	
1	9/30/93	6	1		67	N	
1	9/30/93	7	1		67.1	N	
1	9/30/93	8	1		67.3	N	
1	9/30/93	9	1		67.7	N	
1	9/30/93	10	1		67.9	N	
1	9/30/93	11	1		68.2	N	
1	9/30/93	12	1		68.6	Y	
1	10/13/93	1	1		65.8	N	J 890423320-42
1	10/13/93	2	1		66.2	N	
1	10/13/93	3	1		66.6	N	
1	10/13/93	4	1		66.7	N	
1	10/13/93	5	1		66.7	N	
1	10/13/93	6	1		66.6	N	
1	10/13/93	7	1		66.6	N	
1	10/13/93	8	1		66.6	N	
1	10/13/93	9	1		66.6	N	
1	10/13/93	10	1		67.1	N	
1	10/13/93	11	1		67.3	N	
1	10/13/93	12	1		67.6	Y	
1	10/20/93	1	1		67.4	N	J 910126143-29
1	10/20/93	2	1		67.5	N	
1	10/20/93	3	1		67.7	N	
1	10/20/93	4	1		67.9	N	
1	10/20/93	5	1		67.4	N	
1	10/20/93	6	1		67.3	N	
1	10/20/93	7	1		67.2	N	
1	10/20/93	8	1		67.5	N	
1	10/20/93	9	1		67.9	N	
1	10/20/93	10	1		68.2	N	
1	10/20/93	11	1		68.6	N	
1	10/20/93	12	1		69.2	Y	
1	10/26/93	1	1		68	N	J 910126143-50
1	10/26/93	2	1		68.2	N	
1	10/26/93	3	1		68.5	N	
1	10/26/93	4	1		68.7	N	
1	10/26/93	5	1		68.5	N	
1	10/26/93	6	1		68.5	N	
1	10/26/93	7	1		68.5	N	
1	10/26/93	8	1		68.6	N	
1	10/26/93	9	1		68.8	N	
1	10/26/93	10	1		69	N	
1	10/26/93	11	1		69.1	N	
1	10/26/93	12	1		69.3	Y	
1	11/9/93	1	1		65.8	N	J 890423320-42
1	11/9/93	2	1		66.7	N	
1	11/9/93	3	1		64.9	N	
1	11/9/93	4	1		67.2	N	
1	11/9/93	5	1		67.2	N	
1	11/9/93	6	1		67.1	N	
1	11/9/93	7	1		67.2	N	
1	11/9/93	8	1		67.3	Y	
1	11/9/93	9	1		67.2	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-111							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	11/9/93	10	1		67.2	N	
1	11/9/93	11	1		67.3	N	
1	11/9/93	12	1		67.1	N	
1	11/18/93	1	1		68.4	N	J 91026143-50
1	11/18/93	2	1		69.1	N	
1	11/18/93	3	1		69.4	Y	
1	11/18/93	4	1		69.2	N	
1	11/18/93	5	1		69.2	N	
1	11/18/93	6	1		69.2	N	
1	11/18/93	7	1		69.2	N	
1	11/18/93	8	1		69.2	N	
1	11/18/93	9	1		69.2	N	
1	11/18/93	10	1		69.2	N	
1	11/18/93	11	1		69.1	N	
1	11/18/93	12	1		69.1	N	
1	11/22/93	1	1		70.6	N	J 910126143-50
1	11/22/93	2	1		71.1	N	
1	11/22/93	3	1		71.4	Y	
1	11/22/93	4	1		71	N	
1	11/22/93	5	1		71	N	
1	11/22/93	6	1		70.8	N	
1	11/22/93	7	1		71	N	
1	11/22/93	8	1		71	N	
1	11/22/93	9	1		71.1	N	
1	11/22/93	10	1		71.1	N	
1	11/22/93	11	1		71.2	N	
1	11/22/93	12	1		71.2	N	
1	12/6/93	1	1			N	36 - suspect data (low) J 910126143-50
1	12/6/93	2	1			Y	36.1 - suspect data (low)
1	12/6/93	3	1			N	36.1 - suspect data (low)
1	12/6/93	4	1			N	36.1 - suspect data (low)
1	12/6/93	5	1			N	36.1 - suspect data (low)
1	12/6/93	6	1			N	36.1 - suspect data (low)
1	12/6/93	7	1			N	36 - suspect data (low)
1	12/6/93	8	1			N	36.1 - suspect data (low)
1	12/6/93	9	1			N	36.1 - suspect data (low)
1	12/6/93	10	1			N	36.1 - suspect data (low)
1	12/6/93	11	1			N	36.1 - suspect data (low)
1	12/6/93	12	1			N	36.1 - suspect data (low)

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-112							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	9/24/74	1	1	14	57.2	Y	degree C/TWINS confirm
1	9/24/74	2	1	14	57.2	N	degree C/TWINS confirm
1	9/24/74	3	1	14	57.2	N	degree C/TWINS confirm
1	9/24/74	4	1	14	57.2	N	degree C/TWINS confirm
1	9/24/74	5	1	14	57.2	N	degree C/TWINS confirm
1	9/24/74	6	1	14	57.2	N	degree C/TWINS confirm
1	9/24/74	7	1	14	57.2	N	degree C/TWINS confirm
1	9/24/74	8	1	14	57.2	N	degree C/TWINS confirm
1	9/24/74	9	1	14	57.2	N	degree C/TWINS confirm
1	9/24/74	10	1	14	57.2	N	degree C/TWINS confirm
1	9/24/74	11	1	14	57.2	N	degree C/TWINS confirm
1	9/24/74	12	1	14	57.2	N	degree C/TWINS confirm
1	12/11/74	1	1	23.33	73.994	Y	degree C/TWINS confirm
1	12/11/74	2	1	23.33	73.994	N	degree C/TWINS confirm
1	12/11/74	3	1	21.67	71.006	N	degree C/TWINS confirm
1	12/11/74	4	1	21.67	71.006	N	degree C/TWINS confirm
1	12/11/74	5	1	21.67	71.006	N	degree C/TWINS confirm
1	12/11/74	6	1	21.67	71.006	N	degree C/TWINS confirm
1	12/11/74	7	1	21.67	71.006	N	degree C/TWINS confirm
1	12/11/74	8	1	21.67	71.006	N	degree C/TWINS confirm
1	12/11/74	9	1	21.67	71.006	N	degree C/TWINS confirm
1	12/11/74	10	1	21.67	71.006	N	degree C/TWINS confirm
1	12/11/74	11	1	21.67	71.006	N	degree C/TWINS confirm
1	12/11/74	12	1	21.67	71.006	N	degree C/TWINS confirm
1	4/10/75	1	1	24	75.2	Y	degree C/TWINS confirm
1	4/10/75	2	1	22	71.6	N	degree C/TWINS confirm
1	4/10/75	3	1	22	71.6	N	degree C/TWINS confirm
1	4/10/75	4	1	20	68	N	degree C/TWINS confirm
1	4/10/75	5	1	19	66.2	N	degree C/TWINS confirm
1	4/10/75	6	1	20	68	N	degree C/TWINS confirm
1	4/10/75	7	1	20	68	N	degree C/TWINS confirm
1	4/10/75	8	1	19	66.2	N	degree C/TWINS confirm
1	4/10/75	9	1	20	68	N	degree C/TWINS confirm
1	4/10/75	10	1	20	68	N	degree C/TWINS confirm
1	4/10/75	11	1	20	68	N	degree C/TWINS confirm
1	4/10/75	12	1	20	68	N	degree C/TWINS confirm
1	2/10/76	1	1		70	Y	
1	2/10/76	2	1		69	N	
1	2/10/76	3	1		67	N	
1	2/10/76	4	1		65	N	
1	2/10/76	5	1		65	N	
1	2/10/76	6	1		65	N	
1	2/10/76	7	1		65	N	
1	2/10/76	8	1		65	N	
1	2/10/76	9	1		65	N	
1	2/10/76	10	1		65	N	
1	2/10/76	11	1		65	N	
1	2/10/76	12	1		65	N	
1	4/5/76	1	1		63	Y	
1	4/5/76	2	1		61	N	
1	4/5/76	3	1		59	N	
1	4/5/76	4	1		57	N	
1	4/5/76	5	1		57	N	
1	4/5/76	6	1		56	N	
1	4/5/76	7	1		56	N	
1	4/5/76	8	1		56	N	
1	4/5/76	9	1		56	N	
1	4/5/76	10	1		56	N	
1	4/5/76	11	1		56	N	
1	4/5/76	12	1		56	N	
1	7/20/76	1	1		58	N	
1	7/20/76	2	1		57	N	
1	7/20/76	3	1		57	N	
1	7/20/76	4	1		57	N	
1	7/20/76	5	1		57	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-112							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	7/20/76	6	1		57	N	
1	7/20/76	7	1		57	N	
1	7/20/76	8	1		57	N	
1	7/20/76	9	1		56	N	
1	7/20/76	10	1		69	Y	
1	7/20/76	11	1		69	N	
1	7/20/76	12	1		69	N	
1	1/1/77	1	1		54	Y	
1	1/1/77	2	1		54	N	
1	1/1/77	3	1		54	N	
1	1/1/77	4	1		54	N	
1	1/1/77	5	1		54	N	
1	1/1/77	6	1		54	N	
1	6/23/77	1	1		71	Y	
1	6/23/77	2	1		70	N	
1	6/23/77	3	1		69	N	
1	6/23/77	4	1		69	N	
1	6/23/77	5	1		69	N	
1	6/23/77	6	1		70	N	
1	6/23/77	7	1		70	N	
1	6/23/77	8	1		70	N	
1	6/23/77	9	1		70	N	
1	6/23/77	10	1		70	N	
1	6/23/77	11	1		70	N	
1	6/23/77	12	1		70	N	
1	7/16/77	1	1		65	Y	
1	7/16/77	2	1		64	N	
1	7/16/77	3	1		64	N	
1	7/16/77	4	1		64	N	
1	7/16/77	5	1		64	N	
1	7/16/77	6	1		64	N	
1	7/16/77	7	1		64	N	
1	7/16/77	8	1		64	N	
1	7/16/77	9	1		64	N	
1	7/16/77	10	1		64	N	
1	7/16/77	11	1		64	N	
1	7/16/77	12	1		64	N	
1	7/16/77	13	1		64	N	
1	7/16/77	14	1		64	N	
1	7/26/77	1	1		52	Y	
1	7/26/77	2	1		52	N	
1	7/26/77	3	1		52	N	
1	7/26/77	4	1		52	N	
1	7/26/77	5	1		52	N	
1	7/26/77	6	1		52	N	
1	7/26/77	7	1		52	N	
1	7/26/77	8	1		52	N	
1	7/26/77	9	1		52	N	
1	7/26/77	10	1		52	N	
1	7/26/77	11	1		52	N	
1	7/26/77	12	1		52	N	
1	10/24/77	1	1	12	54	N	
1	10/24/77	3	1		52	Y	
1	10/24/77	5	1		52	N	
1	10/24/77	7	1		52	N	
1	10/24/77	9	1		52	N	
1	10/24/77	10	1		51	N	
1	10/24/77	11	1		51	N	
1	10/24/77	12	1		49	N	
1	1/16/78	1	1		68	Y	
1	1/16/78	2	1		66	N	
1	1/16/78	3	1		64	N	
1	1/16/78	4	1		63	N	
1	1/16/78	5	1		63	N	
1	1/16/78	6	1		63	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-112							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	1/16/78	7	1		63	N	
1	1/16/78	9	1		64	N	
1	1/16/78	10	1		63	N	
1	1/16/78	11	1		64	N	
1	1/16/78	12	1		64	N	
1	4/28/78	1	1		75	Y	
1	4/28/78	2	1		72	N	
1	4/28/78	3	1		68	N	
1	4/28/78	4	1		65	N	
1	4/28/78	5	1		64	N	
1	4/28/78	6	1		64	N	
1	4/28/78	7	1		64	N	
1	4/28/78	8	1		64	N	
1	4/28/78	9	1		64	N	
1	4/28/78	10	1		64	N	
1	4/28/78	11	1		64	N	
1	4/28/78	12	1		63	N	
1	1/5/79	1	1		61	N	
1	1/5/79	2	1		65	Y	
1	1/5/79	3	1		63	N	
1	1/5/79	4	1		62	N	
1	1/5/79	5	1		62	N	
1	1/5/79	6	1		61	N	
1	1/5/79	7	1		61	N	
1	1/5/79	8	1		61	N	
1	1/5/79	9	1		61	N	
1	1/5/79	10	1		61	N	
1	1/5/79	11	1		61	N	
1	1/5/79	12	1		62	N	
1	4/7/79	1	1		65	Y	
1	4/7/79	2	1		63	N	
1	4/7/79	3	1		60	N	
1	4/7/79	4	1		59	N	
1	4/7/79	5	1		58	N	
1	4/7/79	6	1		58	N	
1	4/7/79	7	1		58	N	
1	4/7/79	8	1		58	N	
1	4/7/79	9	1		58	N	
1	4/7/79	10	1		58	N	
1	4/7/79	11	1		58	N	
1	4/7/79	12	1		58	N	
1	4/7/79	13	1		58	N	
1	4/7/79	14	1		58	N	
1	7/1/79	1	1		66	Y	
1	7/1/79	2	1		65	N	
1	7/1/79	3	1		64	N	
1	7/1/79	4	1		64	N	
1	7/1/79	5	1		64	N	
1	7/1/79	6	1		63	N	
1	7/1/79	7	1		63	N	
1	7/1/79	8	1		63	N	
1	7/1/79	9	1		63	N	
1	7/1/79	10	1		63	N	
1	7/1/79	11	1		64	N	
1	7/1/79	12	1		64	N	
1	10/8/79	1	1		69	N	
1	10/8/79	2	1		69	N	
1	10/8/79	3	1		70	N	
1	10/8/79	4	1		71	N	
1	10/8/79	5	1		71	N	
1	10/8/79	6	1		71	N	
1	10/8/79	7	1		71	N	
1	10/8/79	8	1		71	N	
1	10/8/79	9	1		71	N	
1	10/8/79	10	1		71	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-112							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP	COMMENTS
1	10/8/79	11	1		71	N	
1	10/8/79	12	1		72	Y	
1	1/9/80	1	1		90	Y	
1	1/9/80	2	1		89	N	
1	1/9/80	3	1		87	N	
1	1/9/80	4	1		86	N	
1	1/9/80	5	1		86	N	
1	1/9/80	6	1		86	N	
1	1/9/80	7	1		86	N	
1	1/9/80	8	1		86	N	
1	1/9/80	9	1		86	N	
1	1/9/80	10	1		86	N	
1	1/9/80	11	1		86	N	
1	1/9/80	12	1		86	N	
1	4/4/80	1	1		65	Y	
1	4/4/80	2	1		62	N	
1	4/4/80	3	1		60	N	
1	4/4/80	4	1		58	N	
1	4/4/80	5	1		57	N	
1	4/4/80	6	1		57	N	
1	4/4/80	7	1		57	N	
1	4/4/80	8	1		56	N	
1	4/4/80	9	1		56	N	
1	4/4/80	10	1		56	N	
1	4/4/80	11	1		56	N	
1	4/4/80	12	1		56	N	
1	7/5/80	1	1		63	Y	
1	7/5/80	2	1		63	N	
1	7/5/80	3	1		62	N	
1	7/5/80	4	1		62	N	
1	7/5/80	5	1		62	N	
1	7/5/80	6	1		62	N	
1	7/5/80	7	1		62	N	
1	7/5/80	8	1		62	N	
1	7/5/80	9	1		62	N	
1	7/5/80	10	1		62	N	
1	7/5/80	11	1		62	N	
1	7/5/80	12	1		62	N	
1	10/26/80	1	1		73	N	
1	10/26/80	2	1		73	N	
1	10/26/80	3	1		74	Y	
1	10/26/80	4	1		74	N	
1	10/26/80	5	1		74	N	
1	10/26/80	6	1		74	N	
1	10/26/80	7	1		74	N	
1	10/26/80	8	1		74	N	
1	10/26/80	9	1		74	N	
1	10/26/80	10	1		74	N	
1	10/26/80	11	1		74	N	
1	10/26/80	12	1		74	N	
1	8/10/81	1	1		71	Y	
1	8/10/81	2	1		71	N	
1	8/10/81	3	1		71	N	
1	8/10/81	4	1		71	N	
1	8/10/81	5	1		71	N	
1	8/10/81	6	1		71	N	
1	8/10/81	7	1		71	N	
1	8/10/81	8	1		71	N	
1	8/10/81	9	1		71	N	
1	8/10/81	10	1		71	N	
1	8/10/81	11	1		71	N	
1	8/10/81	12	1		71	N	
1	10/13/83	1	1		72	Y	
1	10/13/83	2	1		72	N	
1	10/13/83	3	1		72	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-112						
THERMOCOUPLE DATA						
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y = MAX TEMP
1	10/13/83	4	1		72	N
1	10/13/83	5	1		72	N
1	10/13/83	6	1		72	N
1	10/13/83	7	1		72	N
1	10/13/83	8	1		72	N
1	10/13/83	9	1		72	N
1	10/13/83	10	1		72	N
1	10/13/83	11	1		72	N
1	10/13/83	12	1		72	N
1	2/11/84	1	1		70	Y
1	2/11/84	2	1		69	N
1	2/11/84	3	1		69	N
1	2/11/84	4	1		69	N
1	2/11/84	5	1		69	N
1	2/11/84	6	1		69	N
1	2/11/84	7	1		69	N
1	2/11/84	8	1		69	N
1	2/11/84	9	1		69	N
1	2/11/84	10	1		69	N
1	2/11/84	11	1		69	N
1	2/11/84	12	1		68	N
1	4/14/91	1	1		68.9	Y
1	4/14/91	2	1		68.4	N
1	4/14/91	3	1		66.9	N
1	4/14/91	4	1		64.8	N
1	4/14/91	5	1		64.1	N
1	4/14/91	6	1		64.1	N
1	4/14/91	7	1		64	N
1	4/14/91	8	1		64	N
1	4/14/91	9	1		64.5	N
1	4/14/91	10	1		63.8	N
1	4/14/91	11	1		63.7	N
1	4/14/91	12	1		63.2	N
1	11/12/91	1	1			N
1	1/2/92	1	1			N
1	7/2/92	1	1			N
1	1/1/93	1	1			N
1	7/24/93	1	1		61.9	Y
1	7/24/93	2	1		61.7	N
1	7/24/93	3	1		60.4	N
1	7/24/93	4	1		61.7	N
1	7/24/93	5	1		61.8	N
1	7/24/93	6	1		61.8	N
1	7/24/93	7	1		61.8	N
1	7/24/93	8	1		61.8	N
1	7/24/93	9	1		61.8	N
1	7/24/93	10	1		61.8	N
1	7/24/93	11	1		61.8	N
1	7/24/93	12	1		61.6	N
1	7/31/93	1	1		61.5	N
1	7/31/93	2	1		61.4	N
1	7/31/93	3	1		60.2	N
1	7/31/93	4	1		61.7	N
1	7/31/93	5	1		61.7	N
1	7/31/93	6	1		61.8	Y
1	7/31/93	7	1		61.8	N
1	7/31/93	8	1		61.8	N
1	7/31/93	9	1		61.8	N
1	7/31/93	10	1		61.8	N
1	7/31/93	11	1		61.8	N
1	7/31/93	12	1		61.7	N
1	11/25/93	1	1		67.8	N
1	11/25/93	2	1		68	N
1	11/25/93	3	1		68	N
1	11/25/93	4	1		67.9	N

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

TANK 241-BX-112							
THERMOCOUPLE DATA							
TREE #	DATE	THERMO #	TREE SET #	TEMP C	TEMP F	Y=MAX TEMP	COMMENTS
1	11/25/93	5	1		68	N	
1	11/25/93	6	1		68	N	
1	11/25/93	7	1		68.1	N	
1	11/25/93	8	1		68.2	N	
1	11/25/93	9	1		68.2	N	
1	11/25/93	10	1		68.2	N	
1	11/25/93	11	1		68.3	N	
1	11/25/93	12	1		68.4	Y	
1	12/6/93	1	1		68.8	N	J 910126143-50
1	12/6/93	2	1		69.4	Y	
1	12/6/93	3	1		69.4	Y	
1	12/6/93	4	1		68.9	N	
1	12/6/93	5	1		68.7	N	
1	12/6/93	6	1		68.7	N	
1	12/6/93	7	1		68.8	N	
1	12/6/93	8	1		68.7	N	
1	12/6/93	9	1		68.7	N	
1	12/6/93	10	1		68.7	N	
1	12/6/93	11	1		68.5	N	

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 12, 1993.

**241-BX-101
Surface Level Data**

Manual Tape

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

241-BX-102
Surface Level Data

Manual Tape

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

**241-BX-103
Surface Level Data**

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

**241-BX-104
Surface Level Data**

Manual Tape

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

**241-BX-106
Surface Level Data**

241-BX-107
Surface Level Data

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

241-BX-108
Surface Level Data

Manual Tape

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

241-BX-109
Surface Level Data

FIC

WHC-SD-WM-ER-311, Rev. 0

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

**241-BX-110
Surface Level Data**

Manual Tape

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

241-BX-111
Surface Level Data

Manual Tape

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

**241-BX-112
Surface Level Data**

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Surface Level Data					
Manual Tape					
Year	Month	Day	Hour	Minutes	Surface Level
91	1	2	15	25	10
91	4	1	15	2	10
91	7	1	15	2	10
91	10	1	15	2	10
92	1	1	14	49	10
92	4	1	14	49	10
92	7	6	16	47	10
92	10	6	6	53	10
93	1	4	10	44	10
93	4	8	0	44	10
93	5	13	10	44	11.75
93	5	14	10	44	11.75
93	5	17	14	58	10
93	6	4	14	50	10
93	7	1	14	41	10
93	8	6	15	50	10
93	8	11	13	44	10.25
93	8	12	13	32	10
93	8	13	14	6	10
93	8	14	14	6	10
93	8	15	14	6	10
93	8	16	14	6	10
93	8	17	13	51	10
93	8	18	14	47	10
93	8	19	14	20	10
93	8	21	14	6	11.5
93	8	22	14	6	11.5
93	8	23	13	32	10
93	8	24	13	32	9.5
93	8	25	13	32	9.5
93	8	26	13	32	9.5
93	8	27	13	32	10
93	8	28	13	32	11.75
93	8	29	13	32	12
93	8	30	13	32	10
93	8	31	13	32	10
93	9	1	13	32	10
93	9	2	13	32	10
93	9	3	13	32	12
93	9	4	13	32	12
93	9	5	13	32	12
93	9	6	13	32	12
93	10	1	20	50	11.75
93	10	2	22	58	11.5
93	10	4	23	24	12
93	10	8	20	30	11.5

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.
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[illegible]

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Surface Level Data					
FIC					
Year	Month	Day	Hour	Minutes	Surface Level
91	1	1	7	3	19.8
91	1	2	7	2	19.8
91	1	3	7	3	19.8
91	1	4	7	2	19.8
91	1	5	7	2	19.8
91	1	6	7	2	19.8
91	1	7	7	2	19.8
91	1	8	7	3	19.8
91	1	9	7	2	19.8
91	1	10	7	2	19.8
91	1	11	7	3	19.8
91	1	12	6	2	19.8
91	1	13	7	3	19.8
91	1	14	7	4	19.8
91	1	15	7	3	19.8
91	1	16	7	4	19.8
91	1	17	7	4	19.8
91	1	18	7	4	19.8
91	1	22	7	4	19.8
91	1	23	7	4	19.8
91	1	24	7	4	19.8
91	1	25	7	3	19.8
91	1	26	7	3	19.8
91	1	27	7	3	19.8
91	1	28	7	10	19.8
91	1	29	7	2	19.8
91	1	30	7	10	19.8
91	1	31	7	2	19.8
91	2	1	7	2	19.8
91	2	2	7	4	19.8
91	2	3	7	3	19.8
91	2	4	7	3	19.7
91	2	5	7	4	19.8
91	2	6	7	4	19.8
91	2	7	7	4	19.8
91	2	8	7	4	19.8
91	2	9	7	4	19.8
91	2	10	7	3	19.8
91	2	11	7	4	19.8
91	2	12	7	4	19.8
91	2	13	7	4	19.8
91	2	14	7	4	19.8
91	2	15	7	3	19.8
91	2	16	7	2	19.8
91	2	17	7	2	19.8
91	2	18	7	3	19.7

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
91	2	19	7	2	19.8
91	2	20	7	3	19.8
91	2	21	7	2	19.8
91	2	22	7	2	19.8
91	2	23	7	2	19.8
91	2	24	7	3	19.8
91	2	25	7	3	19.7
91	2	26	7	3	19.7
91	2	27	7	2	19.8
91	2	28	7	2	19.8
91	3	1	7	2	19.8
91	3	2	7	2	19.8
91	3	3	7	3	19.7
91	3	4	7	3	19.8
91	3	5	7	3	19.7
91	3	6	7	2	19.7
91	3	7	7	2	19.7
91	3	8	7	2	19.7
91	3	9	7	2	19.7
91	3	10	7	2	19.8
91	3	11	7	2	19.7
91	3	12	7	3	19.8
91	3	13	7	3	19.8
91	3	14	7	3	19.7
91	3	15	7	3	19.7
91	3	16	7	3	19.8
91	3	17	7	2	19.8
91	3	18	7	3	19.8
91	3	19	7	3	19.8
91	3	20	7	2	19.8
91	3	21	7	3	19.8
91	3	22	7	2	19.7
91	3	23	7	3	19.7
91	3	24	7	3	19.8
91	3	25	7	3	19.7
91	3	26	7	3	19.8
91	3	27	7	3	19.8
91	3	28	7	3	19.8
91	3	29	7	3	19.8
91	3	30	7	3	19.8
91	3	31	7	3	19.8
91	4	1	7	3	19.8
91	4	2	7	3	19.8
91	4	3	7	3	19.8
91	4	4	7	3	19.8
91	4	5	7	3	19.8
91	4	6	7	3	19.7
91	4	7	7	3	19.8

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
91	4	8	7	4	19.8
91	4	9	7	3	19.8
91	4	10	7	3	19.7
91	4	11	7	3	19.8
91	4	12	7	3	19.8
91	4	13	7	4	19.8
91	4	14	7	3	19.8
91	4	15	7	3	19.8
91	4	16	7	10	19.8
91	4	17	7	3	19.8
91	4	18	7	6	19.7
91	4	19	7	5	19.7
91	4	20	7	6	19.8
91	4	21	7	5	19.8
91	4	22	7	6	19.8
91	4	23	7	6	19.8
91	4	24	6	6	19.8
91	4	25	7	5	19.8
91	4	26	7	5	19.8
91	4	27	7	5	19.7
91	4	28	7	6	19.7
91	4	29	7	5	19.8
91	4	30	7	6	19.8
91	5	1	7	5	19.8
91	5	2	7	5	19.8
91	5	3	7	6	19.8
91	5	4	7	5	19.7
91	5	5	7	5	19.8
91	5	6	7	5	19.7
91	5	7	7	5	19.8
91	5	8	7	5	19.8
91	5	9	7	5	19.8
91	5	10	7	5	19.8
91	5	11	7	5	19.8
91	5	12	7	5	19.8
91	5	13	7	5	19.7
91	5	14	7	5	19.8
91	5	15	6	5	19.8
91	5	16	7	6	19.8
91	5	17	7	6	19.8
91	5	18	7	6	19.7
91	5	19	7	5	19.8
91	5	20	6	6	19.8
91	5	21	7	6	19.7
91	5	22	7	5	19.8
91	5	23	7	5	19.8
91	5	24	7	5	19.7
91	5	25	7	5	19.8

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
91	5	26	7	5	19.8
91	5	27	7	5	19.8
91	5	28	6	5	19.8
91	5	29	7	5	19.8
91	5	30	7	5	19.8
91	5	31	7	5	19.8
91	6	1	7	5	19.7
91	6	2	7	5	19.7
91	6	3	7	5	19.8
91	6	4	7	5	19.8
91	6	5	7	5	19.8
91	6	6	7	6	19.8
91	6	11	7	5	19.7
91	6	12	7	4	19.7
91	6	13	7	5	19.8
91	6	14	7	5	19.8
91	6	15	7	5	19.7
91	6	16	7	5	19.8
91	6	17	7	5	19.8
91	6	18	7	5	19.8
91	6	19	7	5	19.8
91	6	20	7	5	19.8
91	6	21	7	6	19.8
91	6	22	7	5	19.8
91	6	23	7	5	19.8
91	6	24	7	5	19.8
91	6	25	7	6	19.8
91	6	26	7	3	19.8
91	6	27	7	2	19.8
91	6	28	7	3	19.8
91	6	29	7	2	19.8
91	7	1	10	6	19.8
91	7	8	10	6	19.8
91	7	23	10	6	19.8
91	7	29	10	6	19.8
91	8	5	10	2	19.8
91	9	23	10	3	19.8
91	9	30	10	3	19.8
91	10	1	10	2	19.8
91	10	14	10	2	19.8
91	10	31	6	2	19.9
91	11	1	7	2	19.9
91	11	2	7	3	19.9
91	11	3	7	3	19.9
91	11	4	7	2	19.9
91	11	5	7	3	19.9
91	11	6	7	3	19.9
91	11	7	7	2	19.9

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
91	11	8	7	3	19.9
91	11	9	7	2	19.9
91	11	10	7	3	19.9
91	11	11	7	10	19.9
91	11	12	7	3	19.9
91	11	13	7	3	19.9
91	11	14	7	3	19.9
91	11	15	7	3	19.9
91	11	16	7	3	19.9
91	11	17	7	2	19.8
91	11	18	7	3	19.9
91	11	19	7	3	19.9
91	11	20	7	3	19.9
91	11	21	7	2	19.9
91	11	23	7	2	19.9
91	11	24	7	3	19.9
91	11	25	7	3	19.8
91	11	27	7	3	19.9
91	11	28	7	3	19.9
91	11	29	7	3	19.9
91	11	30	7	3	19.9
91	12	2	7	3	19.9
91	12	3	7	3	19.9
91	12	4	7	3	19.9
91	12	5	7	3	19.9
91	12	6	6	3	19.9
91	12	7	7	3	19.8
91	12	8	7	3	19.9
91	12	9	7	3	19.9
91	12	10	7	3	19.9
91	12	11	7	2	19.9
91	12	12	7	3	19.9
91	12	13	7	5	19.9
91	12	14	7	2	19.9
91	12	15	7	2	19.9
91	12	16	7	3	19.9
91	12	18	7	3	19.9
91	12	21	7	3	19.9
91	12	22	7	5	19.9
91	12	23	7	6	19.9
91	12	24	7	3	19.9
91	12	25	7	3	19.9
91	12	26	7	3	19.9
91	12	27	7	3	19.9
91	12	28	7	2	19.9
91	12	29	7	3	19.9
91	12	30	7	3	19.9
91	12	31	7	3	19.9

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
92	1	1	7	3	19.9
92	1	2	7	2	19.9
92	1	3	7	4	19.9
92	1	4	7	3	19.9
92	1	5	7	3	19.9
92	1	6	7	3	19.9
92	1	7	7	4	19.9
92	1	8	7	3	19.9
92	1	9	7	3	19.9
92	1	10	7	4	19.9
92	1	11	7	4	19.9
92	1	15	7	3	19.9
92	1	16	7	4	19.9
92	1	17	7	4	19.9
92	1	18	7	4	19.9
92	1	19	7	3	19.9
92	1	20	7	3	19.9
92	1	21	7	3	19.9
92	1	22	7	6	19.9
92	1	23	7	3	19.9
92	1	24	7	2	19.9
92	1	25	7	3	19.9
92	1	26	7	10	19.9
92	1	27	7	2	19.9
92	1	28	7	3	19.9
92	1	29	7	3	19.9
92	1	30	5	3	19.9
92	1	31	7	3	19.9
92	2	1	7	2	19.9
92	2	2	7	3	19.9
92	2	3	7	3	19.9
92	2	4	7	3	19.9
92	2	5	7	2	19.9
92	2	8	7	4	19.9
92	2	9	7	3	19.9
92	2	10	7	4	19.9
92	2	11	7	3	19.9
92	2	12	7	3	19.9
92	2	13	7	3	19.9
92	2	14	7	3	19.9
92	2	15	7	3	19.9
92	2	16	7	3	19.9
92	2	17	7	3	19.9
92	2	18	6	2	19.9
92	2	19	7	3	19.9
92	2	20	7	3	19.8
92	2	21	7	3	19.8
92	2	22	7	3	19.9

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
92	2	23	7	3	19.9
92	2	24	7	3	19.8
92	2	25	7	4	19.9
92	2	26	7	3	19.8
92	2	27	7	4	19.8
92	2	28	7	4	19.9
92	2	29	7	3	19.8
92	3	1	7	3	19.8
92	3	2	7	3	19.9
92	3	3	7	4	19.9
92	3	4	7	4	19.9
92	3	5	7	3	19.9
92	3	6	7	3	19.9
92	3	7	7	2	19.9
92	3	8	7	2	19.9
92	3	9	7	2	19.9
92	3	10	7	3	19.8
92	3	11	7	3	19.9
92	3	12	7	3	19.9
92	3	13	7	3	19.9
92	3	14	7	3	19.9
92	3	15	7	6	19.8
92	3	16	7	3	19.9
92	3	17	7	3	19.9
92	3	18	7	3	19.9
92	3	19	7	3	19.9
92	3	20	7	2	19.9
92	3	21	7	3	19.8
92	3	22	7	2	19.9
92	3	23	7	2	19.8
92	3	24	7	2	19.9
92	3	25	7	3	19.9
92	3	26	7	3	19.9
92	3	27	7	2	19.8
92	3	28	7	3	19.8
92	3	29	7	3	19.8
92	3	30	7	3	19.9
92	3	31	7	3	19.9
92	4	1	7	3	19.8
92	4	2	7	3	19.9
92	4	3	7	3	19.8
92	4	4	7	3	19.8
92	4	5	7	3	19.9
92	4	6	7	3	19.8
92	4	7	7	3	19.9
92	4	8	7	10	19.9
92	4	9	7	3	19.9
92	4	10	7	3	19.9

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
92	4	11	7	3	19.8
92	4	12	7	4	19.9
92	4	13	7	3	19.9
92	4	14	7	3	19.9
92	4	15	7	2	19.9
92	4	16	7	3	19.8
92	4	17	7	3	19.8
92	4	18	7	2	19.9
92	4	19	7	2	19.9
92	4	20	7	3	19.9
92	4	21	7	3	19.8
92	4	22	7	2	19.9
92	4	23	7	3	19.8
92	4	24	7	3	19.9
92	4	25	7	4	19.8
92	4	26	7	3	19.8
92	4	27	7	4	19.8
92	4	28	7	3	19.8
92	4	29	7	3	19.8
92	4	30	7	3	19.9
92	5	1	7	3	19.9
92	5	2	7	3	19.9
92	5	3	7	3	19.8
92	5	4	7	3	19.8
92	5	5	7	4	19.8
92	5	6	7	3	19.8
92	5	7	7	4	19.8
92	5	8	7	3	19.8
92	5	9	7	4	19.9
92	5	10	7	4	19.8
92	5	11	6	3	19.9
92	5	12	7	3	19.9
92	5	13	7	3	19.8
92	5	14	7	3	19.9
92	5	15	7	3	19.8
92	5	16	7	3	19.8
92	5	17	7	2	19.8
92	5	18	7	3	19.8
92	5	19	7	3	19.8
92	5	20	7	3	19.9
92	5	21	7	3	19.9
92	5	22	7	2	19.9
92	5	23	7	3	19.8
92	5	24	7	3	19.8
92	5	25	7	3	19.8
92	5	27	6	3	19.8
92	5	28	7	2	19.8
92	5	29	7	2	19.8

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
92	5	30	7	3	19.8
92	5	31	7	3	19.8
92	6	1	7	3	19.8
92	6	2	7	3	19.8
92	6	3	7	3	19.8
92	6	4	7	3	19.8
92	6	5	7	2	19.8
92	6	6	7	3	19.8
92	6	7	7	3	19.8
92	6	8	7	3	19.8
92	6	9	7	3	19.8
92	6	10	7	3	19.8
92	6	11	7	3	19.8
92	6	12	7	5	19.9
92	6	13	7	5	19.9
92	6	15	7	3	19.9
92	6	16	7	3	19.8
92	6	17	7	3	19.8
92	6	18	7	3	19.8
92	6	19	7	2	19.8
92	6	20	7	2	19.8
92	6	21	7	3	19.8
92	6	22	7	3	19.8
92	6	23	7	3	19.8
92	6	24	7	3	19.8
92	6	25	7	3	19.8
92	6	26	7	2	19.8
92	6	27	7	3	19.8
92	6	28	7	6	19.8
92	6	29	7	6	19.8
92	6	30	7	6	19.9
92	7	4	7	6	20
92	7	5	7	6	20
92	7	6	7	6	19.9
92	7	7	7	6	19.9
92	7	8	7	6	19.9
92	7	9	7	6	19.9
92	7	10	7	6	19.9
92	7	11	7	6	19.9
92	7	12	7	6	19.9
92	7	13	7	6	19.9
92	7	14	7	6	19.9
92	7	15	7	6	19.9
92	7	16	7	6	19.9
92	7	17	7	6	19.9
92	7	18	7	6	19.9
92	7	19	7	6	19.9
92	7	20	6	6	19.9

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
92	7	25	4	6	19.9
92	8	3	10	2	19.8
92	9	11	10	3	20
92	9	14	10	3	20
92	9	17	7	6	20
92	9	18	7	6	20
92	9	21	7	6	20
92	9	22	7	3	20
92	9	23	7	3	20
92	9	24	7	3	20
92	9	25	7	3	20
92	9	26	7	2	20
92	9	27	7	2	20
92	9	28	7	2	20
92	9	29	7	3	20
92	9	30	7	2	20
92	10	1	7	3	20
92	10	2	7	2	20
92	10	3	7	3	20
92	10	4	7	3	20
92	10	5	7	3	20
92	10	6	7	3	20
92	10	8	7	2	20
92	10	9	7	3	20
92	10	10	7	3	20
92	10	11	7	3	20
92	10	14	7	3	20
92	10	15	7	4	20
92	10	16	7	3	20
92	10	17	7	3	20
92	10	18	7	3	20
92	10	19	7	3	20
92	10	20	7	3	20
92	10	21	7	3	20
92	10	24	7	3	20
92	10	25	7	3	20
92	10	27	7	4	20
92	10	28	7	3	20
92	10	29	7	3	20
92	10	30	7	3	20
92	10	31	7	3	20
92	11	1	7	3	20
92	11	2	7	3	20
92	11	3	7	3	20
92	11	4	7	3	20
92	11	10	7	3	20
92	11	11	7	4	20
92	11	12	7	3	20

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
92	11	13	7	4	20
92	11	14	7	4	20
92	11	15	7	4	20
92	11	16	7	4	20
92	11	17	7	4	20
92	11	18	7	2	20
92	11	19	7	2	20
92	11	20	7	3	20
92	11	21	7	2	20
92	11	22	7	3	20
92	11	23	7	3	20
92	11	24	7	3	20
92	11	25	7	3	20
92	11	26	7	3	20
92	11	27	7	3	20
92	11	28	7	3	20
92	11	29	7	3	20
92	12	1	7	3	20
92	12	2	7	3	20
92	12	3	7	3	20
92	12	4	7	3	20
92	12	6	7	2	20
92	12	7	7	3	20
92	12	8	7	3	20
92	12	9	7	3	20
92	12	10	7	3	20
92	12	11	7	3	20
92	12	13	7	4	20
92	12	14	7	3	20
92	12	15	7	3	20
92	12	16	7	4	20
92	12	17	7	3	20
92	12	18	7	3	20
92	12	19	7	3	20
92	12	20	7	4	20
92	12	21	7	4	20
92	12	23	7	4	20
92	12	24	7	3	20
92	12	25	7	3	20
92	12	26	7	3	20
92	12	27	7	3	20
92	12	28	7	3	20
93	1	4	10	4	20
93	1	18	10	4	20.25
93	1	20	10	4	20.3
93	1	25	10	4	20.25
93	2	1	10	4	20.3
93	2	8	10	4	20.4

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
93	2	22	10	4	20.3
93	3	1	10	4	20.3
93	3	15	10	4	20.3
93	3	19	10	4	20.4
93	3	22	10	4	20.4
93	3	29	10	4	20.4
93	5	19	7	3	20.4
93	5	20	7	3	20.4
93	5	22	7	3	20.4
93	5	23	7	4	20.4
93	5	24	7	3	20.4
93	5	25	7	3	20.4
93	5	26	7	3	20.4
93	5	27	7	3	20.4
93	5	28	7	3	20.4
93	5	29	7	5	20.4
93	5	30	7	5	20.4
93	5	31	7	6	20.4
93	6	1	7	6	20.4
93	6	2	7	6	20.4
93	6	3	7	6	20.4
93	6	4	7	6	20.4
93	6	5	7	6	20.4
93	6	6	7	5	20.4
93	6	7	7	5	20.4
93	6	8	7	5	20.4
93	6	9	7	5	20.4
93	6	10	7	4	20.4
93	6	11	7	5	20.4
93	6	12	7	5	20.4
93	6	13	7	4	20.4
93	6	14	7	5	20.4
93	6	15	7	5	20.4
93	6	16	7	5	20.4
93	6	17	7	5	20.4
93	6	18	7	6	20.4
93	6	25	7	3	20.4
93	6	26	7	3	20.4
93	6	27	7	4	20.4
93	6	28	7	3	20.4
93	6	29	7	4	20.4
93	6	30	7	3	20.4
93	7	1	7	6	20.4
93	7	2	7	6	20.4
93	7	3	7	3	20.4
93	7	4	7	4	20.4
93	7	5	7	3	20.4
93	7	6	7	3	20.4

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
93	7	7	7	4	20.4
93	7	8	7	4	20.4
93	7	9	7	5	20.4
93	7	10	7	3	20.4
93	7	11	7	3	20.4
93	7	12	7	2	20.4
93	7	13	7	3	20.4
93	7	14	7	6	20.4
93	7	15	7	6	20.4
93	7	16	7	6	20.4
93	7	17	7	7	20.4
93	7	18	7	6	20.4
93	7	19	7	3	20.4
93	7	20	7	3	20.4
93	7	21	7	3	20.4
93	7	22	7	3	20.4
93	7	23	7	3	20.4
93	7	24	7	3	20.4
93	7	26	7	3	20.4
93	7	27	7	3	20.4
93	7	28	7	4	20.4
93	7	29	7	3	20.4
93	7	30	7	3	20.4
93	7	31	7	3	20.4
93	8	1	7	3	20.4
93	8	2	7	6	20.4
93	8	3	7	3	20.4
93	8	4	7	3	20.4
93	8	5	7	4	20.4
93	8	7	7	4	20.4
93	8	8	6	4	20.4
93	8	9	7	4	20.4
93	8	10	7	4	20.4
93	8	11	7	4	20.4
93	8	12	7	4	20.4
93	8	13	7	4	20.4
93	8	14	7	3	20.4
93	8	15	7	4	20.4
93	8	16	7	4	20.4
93	8	17	7	4	20.4
93	8	18	7	3	20.4
93	8	19	7	4	20.4
93	8	20	7	4	20.4
93	8	21	7	4	20.4
93	8	22	7	4	20.5
93	8	23	6	3	20.4
93	8	24	7	4	20.5
93	8	25	7	4	20.5

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
93	8	26	7	4	20.5
93	8	27	7	5	20.4
93	8	28	7	4	20.5
93	8	29	7	3	20.4
93	8	30	7	4	20.5
93	8	31	7	4	20.5
93	9	1	7	4	20.5
93	9	30	7	3	20.5
93	10	1	7	6	20.5
93	10	2	7	5	20.5
93	10	3	7	6	20.5
93	10	4	7	6	20.5
93	10	5	7	6	20.5
93	10	6	7	6	20.5
93	10	7	7	5	20.5
93	10	8	7	4	20.5
93	10	9	7	3	20.5
93	10	10	7	10	20.5
93	10	11	7	3	20.5
93	10	12	7	4	20.5
93	10	13	7	3	20.5
93	10	14	7	4	20.5
93	10	15	7	4	20.5
93	10	16	7	4	20.5
93	10	17	7	3	20.5
93	10	18	7	4	20.5
93	10	19	7	4	20.5
93	10	20	7	3	20.5
93	10	21	7	4	20.5
93	10	22	7	4	20.5
93	10	23	7	4	20.5
93	10	24	7	4	20.5
93	10	26	7	10	20.5
93	10	27	7	4	20.5
93	10	28	7	4	20.5
93	10	29	7	10	20.5
93	10	30	7	4	20.5
93	10	31	7	6	20.5
93	11	1	7	6	20.5
93	11	3	7	6	20.5
93	11	5	7	6	20.5
93	11	6	7	6	20.5
93	11	7	7	6	20.5
93	11	8	7	6	20.5
93	11	9	7	3	20.5
93	11	10	7	4	20.5
93	11	11	7	4	20.5
93	11	12	7	4	20.5

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

[illegible]

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

Surface Level Data					
FIC					
Year	Month	Day	Hour	Minutes	Surface Level
91	1	1	7	3	31.7
91	1	2	7	2	*61.7
91	1	3	7	3	31.7
91	1	4	7	2	*61.7
91	1	5	7	2	31.7
91	1	6	7	2	31.7
91	1	7	7	2	31.7
91	1	8	7	3	31.7
91	1	9	7	2	31.7
91	1	10	7	2	31.7
91	1	11	7	3	31.7
91	1	12	6	2	31.8
91	1	13	7	3	31.7
91	1	14	7	4	31.7
91	1	15	7	3	31.7
91	1	16	7	4	31.6
91	1	17	7	4	31.7
91	1	18	7	4	31.7
91	1	22	7	4	31.7
91	1	23	7	4	31.7
91	1	24	7	4	31.7
91	1	25	7	3	31.7
91	1	26	7	3	31.7
91	1	27	7	3	31.7
91	1	28	7	10	31.7
91	1	29	7	2	31.7
91	1	30	7	10	31.7
91	1	31	7	2	31.7
91	2	1	7	2	31.7
91	2	2	7	4	31.7
91	2	3	7	3	31.7
91	2	4	7	3	31.7
91	2	5	7	4	31.7
91	2	6	7	4	31.6
91	2	7	7	4	31.7
91	2	8	7	4	31.7
91	2	9	7	4	31.7
91	2	10	7	3	31.7
91	2	11	7	4	31.7
91	2	12	7	4	31.7
91	2	13	7	4	31.7
91	2	14	7	4	31.6
91	2	15	7	3	31.7
91	2	16	7	2	31.7
91	2	17	7	2	31.7
91	2	18	7	3	31.6

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

*Inaccurate Data

Year	Month	Day	Hour	Minutes	Surface Level
91	2	19	7	2	31.7
91	2	20	7	3	31.7
91	2	21	7	2	31.6
91	2	22	7	2	31.7
91	2	23	7	2	31.6
91	2	24	7	3	31.6
91	11	5	7	3	32
91	11	6	7	3	32
91	11	7	7	2	31.9
91	11	8	7	3	32
91	11	9	7	2	32
91	11	10	7	3	32
91	11	11	7	10	32
93	5	25	7	3	31.9
93	5	26	7	3	31.9
93	5	27	7	3	31.9
93	5	28	7	3	31.9
93	5	29	7	5	31.8
93	5	30	7	5	31.9
93	5	31	7	6	31.9
93	6	1	7	6	31.8
93	6	2	7	6	31.8
93	6	3	7	6	31.9
93	6	4	7	6	31.9
93	6	5	7	6	31.9
93	6	6	7	5	31.9
93	6	7	7	5	31.8
93	6	8	7	5	31.8
93	6	9	7	5	31.9
93	6	10	7	4	31.8
93	6	11	7	5	31.9
93	6	12	7	5	31.8
93	6	13	7	4	31.8
93	6	14	7	5	31.9
93	6	15	7	5	31.9
93	6	16	7	5	31.8
93	6	17	7	5	31.8
93	6	18	7	6	31.9
93	6	25	7	3	31.9
93	6	26	7	3	31.9
93	6	27	7	4	31.8
93	6	28	7	3	31.9
93	6	29	7	4	31.8
93	6	30	7	3	31.9
93	7	1	7	6	31.9
93	7	2	7	6	31.9
93	7	3	7	3	31.9
93	7	4	7	4	31.9

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

*Inaccurate Data

Year	Month	Day	Hour	Minutes	Surface Level
93	7	5	7	3	31.9
93	7	6	7	3	31.9
93	7	7	7	4	31.9
93	7	8	7	4	31.9
93	7	9	7	5	31.9
93	7	10	7	3	31.9
93	7	11	7	3	31.9
93	7	12	7	2	31.9
93	7	13	7	3	31.9
93	7	14	7	6	31.9
93	7	15	7	6	31.9
93	7	16	7	6	31.9
93	7	17	7	7	31.9
93	7	18	7	6	31.9
93	7	19	7	3	31.9
93	7	20	7	3	31.9
93	7	21	7	3	31.9
93	7	22	7	3	31.9
93	7	23	7	3	31.9
93	7	24	7	3	31.9
93	7	26	7	3	31.9
93	7	27	7	3	31.9
93	7	28	7	4	31.9
93	7	29	7	3	31.9
93	7	30	7	3	31.8
93	7	31	7	3	31.8
93	8	1	7	3	31.8
93	8	2	7	6	31.9
93	8	3	7	3	31.9
93	8	4	7	3	31.9
93	8	5	7	4	31.9
93	8	7	7	4	31.9
93	8	8	6	4	31.9
93	8	9	7	4	31.9
93	8	10	7	4	31.9
93	8	11	7	4	31.9
93	8	12	7	4	31.9
93	8	13	7	4	31.9
93	8	14	7	3	31.9
93	8	15	7	4	31.9
93	8	16	7	4	32
93	8	17	7	4	31.9
93	8	18	7	3	31.9
93	8	19	7	4	31.9
93	8	20	7	4	31.9
93	8	21	7	4	31.9
93	8	22	7	4	31.9
93	8	23	6	3	31.9

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

*Inaccurate Data

Year	Month	Day	Hour	Minutes	Surface Level
93	8	24	7	4	31.9
93	8	25	7	4	31.9
93	8	26	7	4	31.9
93	8	27	7	5	31.9
93	8	28	7	4	31.9
93	8	29	7	3	31.9
93	8	30	7	4	31.9
93	8	31	7	4	32
93	9	1	7	4	32
93	9	30	7	3	32
93	10	1	7	6	31.9
93	10	2	7	5	31.9
93	10	3	7	6	32
93	10	4	7	6	32
93	10	5	7	6	32
93	10	6	7	6	32
93	10	7	7	5	31.9
93	10	8	7	4	31.9
93	10	9	7	3	31.9
93	10	10	7	10	32
93	10	11	7	3	32
93	10	12	7	4	32
93	10	13	7	3	32
93	10	14	7	4	32
93	10	15	7	4	32
93	10	16	7	4	32
93	10	17	7	3	32
93	10	18	7	4	32
93	10	19	7	4	32
93	10	20	7	3	31.9
93	10	21	7	4	32
93	10	22	7	4	32
93	10	23	7	4	32
93	10	24	7	4	32
93	10	26	7	10	31.9
93	10	27	7	4	32
93	10	28	7	4	32
93	10	29	7	10	32
93	10	30	7	4	32
93	10	31	7	6	32
93	11	1	7	6	31.9
93	11	3	7	6	32
93	11	5	7	6	31.9
93	11	6	7	6	32
93	11	7	7	6	32
93	11	8	7	6	32
93	11	9	7	3	32
93	11	10	7	4	32

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

*Inaccurate Data

Surface Level Data					
FIC					
Year	Month	Day	Hour	Minutes	Surface Level
91	1	2	8	11	12.45
91	1	8	9	37	12.35
91	1	14	15	11	12.4
91	1	19	15	25	12.4
91	1	22	7	59	12.4
91	1	28	15	8	12.4
91	1	29	8	11	12.4
91	2	4	15	28	12.4
91	2	12	16	39	12.4
91	2	18	18	25	12.45
91	2	25	15	12	12.45
91	3	4	14	56	12.45
91	3	11	16	42	12.5
91	3	18	17	25	12.5
91	3	25	16	27	12.5
91	4	1	15	2	12.6
91	4	8	17	53	12.6
91	4	15	21	17	12.6
91	4	23	0	25	12.5
91	4	29	17	17	12.5
91	5	7	15	20	12.5
91	5	13	14	54	12.45
91	5	20	14	57	12.4
91	5	27	14	41	12.4
91	6	3	14	56	12.4
91	6	10	14	55	12.4
91	6	17	15	8	12.4
91	6	24	18	8	12.4
91	7	1	14	23	12.6
91	7	8	14	23	12.25
91	7	15	14	23	12.6
91	7	22	21	50	12.6
91	7	31	0	22	12.5
91	8	6	4	20	12.6
91	8	12	15	17	12.6
91	8	19	14	58	12.6
91	8	26	14	58	12.6
91	9	2	14	57	12.65
91	9	9	14	57	12.6
91	9	16	14	57	12.6
91	9	23	14	57	12.6
91	9	30	14	57	12.6
91	10	7	10	31	12.6
91	10	14	10	31	12.6
91	10	21	10	31	12.6
91	10	28	10	31	12.6

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

* Inaccurate Data

Year	Month	Day	Hour	Minutes	Surface Level
91	11	4	10	31	12.6
91	11	11	10	31	12.7
91	11	18	10	31	12.65
91	11	25	10	31	12.6
91	12	2	10	31	12.6
91	12	9	10	31	12.6
91	12	16	10	31	12.5
91	12	24	0	31	12.6
91	12	30	10	31	12.65
92	2	25	15	15	12.6
92	3	4	8	32	12.5
92	3	11	8	23	12.5
92	3	16	16	33	12.7
92	3	23	16	56	12.7
92	3	30	16	57	12.7
92	4	6	17	57	12.75
92	4	13	15	39	12.7
92	4	20	16	29	12.7
92	4	27	22	5	12.7
92	5	6	7	52	12.7
92	5	11	15	27	12.7
92	5	20	8	15	12.7
92	5	25	15	27	12.7
92	6	2	7	46	12.7
92	6	8	15	25	12.5
92	6	15	15	16	12.5
92	6	25	7	36	12.5
92	7	6	16	47	12.55
92	7	13	15	21	12.5
92	7	21	15	19	12.5
92	7	28	14	31	12.5
92	8	4	15	1	12.55
92	8	11	15	22	12.5
92	8	17	15	30	12.55
92	8	24	15	2	12.55
92	9	1	15	25	12.6
92	9	8	23	5	12.6
92	9	23	14	20	12.6
92	9	28	19	52	12.2
92	10	6	6	53	12.6
92	10	12	15	40	12.6
92	10	19	15	15	12.6
92	10	26	15	40	12.7
92	11	2	15	20	12.7
92	11	9	19	44	12.7
92	11	16	19	44	12.7
92	11	25	7	57	12.65
92	12	1	18	2	12.7

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

*Inaccurate Data

Year	Month	Day	Hour	Minutes	Surface Level
92	12	7	17	40	12.7
92	12	14	14	4	12.7
92	12	22	20	48	13
92	12	28	22	13	12.3
93	1	13	15	2	12.3
93	1	18	20	43	12.3
93	1	25	22	57	12.5
93	2	3	2	28	12.5
93	2	10	9	55	12.5
93	3	19	23	26	12.3
93	3	24	9	49	12.3
93	4	7	8	4	12.3
93	4	12	17	37	12.4
93	4	19	13	43	12.3
93	4	26	19	2	12.3
93	5	11	15	14	12.35
93	5	20	15	30	12.4
93	5	24	14	14	12.35
93	6	1	14	51	12.35
93	6	7	17	0	12.4
93	6	14	14	51	*148
93	6	14	15	19	12.3
93	6	14	15	20	12.4
93	6	14	15	38	12.4
93	7	6	11	2	12.5
93	7	11	13	27	12.45
93	7	12	15	14	12.4
93	7	13	16	39	12.45
93	7	14	19	27	12.45
93	7	16	15	16	12.4
93	7	17	15	17	12.5
93	7	18	14	38	12.5
93	7	19	14	40	*150
93	7	19	15	48	12.5
93	7	20	14	39	12.5
93	7	21	23	11	12.5
93	7	22	14	29	12.5
93	7	23	18	12	12.5
93	7	24	14	34	12.5
93	7	25	19	38	12.4
93	7	26	15	1	12.4
93	7	27	13	59	12.4
93	7	29	19	47	12.5
93	7	30	23	0	12.55
93	7	31	18	20	12.55
93	8	1	15	30	12.6
93	8	2	14	39	12.5
93	8	3	14	31	12.4

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

*Inaccurate Data

Year	Month	Day	Hour	Minutes	Surface Level
93	8	4	17	41	12.4
93	8	6	15	50	12.5
93	8	7	13	30	12.55
93	8	8	15	0	12.55
93	8	9	15	1	*151.2
93	8	9	15	9	12.6
93	8	10	13	40	12.55
93	8	11	13	44	12.55
93	8	12	13	32	12.6
93	8	13	14	6	12.55
93	8	14	15	18	12.55
93	8	15	17	4	12.55
93	8	17	13	51	12.55
93	8	18	14	47	12.6
93	8	19	14	20	12.6
93	8	20	11	18	12.6
93	8	21	13	37	12.55
93	8	22	14	21	12.55
93	8	23	19	28	12.55
93	8	24	16	34	12.55
93	8	25	17	5	12.55
93	8	26	15	17	12.5
93	8	27	18	40	*150.6
93	8	27	18	46	12.55
93	8	28	15	27	12.55
93	9	29	16	38	12.6
93	9	30	21	35	12.6
93	10	1	20	56	12.6
93	10	2	22	58	12.6
93	10	4	23	24	12.6
93	10	5	13	46	12.6
93	10	6	21	13	12.6
93	10	8	20	30	12.6
93	10	9	21	15	12.6
93	10	10	22	18	12.7
93	10	12	0	19	12.75
93	10	13	21	54	12.8
93	10	14	17	39	12.8
93	10	15	20	3	12.8
93	10	16	20	12	12.75
93	10	17	14	0	12.75
93	10	18	21	13	12.75
93	10	19	21	19	12.75
93	10	20	21	44	12.75
93	10	21	21	52	12.75
93	10	23	20	54	12.75
93	10	26	21	32	12.75
93	10	27	21	20	12.75

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

*Inaccurate Data

[illegible]

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

Surface Level Data					
FIC					
Year	Month	Day	Hour	Minutes	Surface Level
91	1	1	3	3	120.4
91	1	2	3	3	120.4
91	1	3	3	2	120.5
91	1	4	1	2	120.4
91	1	5	0	3	120.4
91	1	8	3	2	120.4
91	1	12	6	2	120.5
91	1	14	3	3	120.4
91	1	16	0	4	120.4
91	1	18	4	4	120.4
91	1	22	6	4	120.4
91	1	24	7	4	120.4
91	1	25	7	3	120.3
91	1	26	7	3	120.3
91	1	27	7	3	120.4
91	3	1	7	2	120.5
91	11	5	7	3	120.5
91	11	6	7	3	120.5
91	11	7	7	2	120.5
91	11	8	7	3	120.5
91	11	9	7	2	120.5
91	11	10	7	3	120.5
91	11	11	7	10	120.5
92	6	13	7	5	120.7
92	6	15	7	3	123.8
92	10	27	7	4	121
92	10	28	7	3	121
92	10	29	7	3	121
92	10	30	7	3	121
92	10	31	7	3	121
92	11	1	7	3	121
92	11	2	7	3	120.9
92	11	3	7	3	120.8
92	11	4	7	3	120.9
92	11	10	7	3	120.9
92	11	11	7	4	120.9
92	11	12	7	3	120.9
92	11	13	7	4	121
92	11	14	7	4	120.9
92	11	15	7	4	120.9
92	11	16	7	4	120.9
92	11	17	7	4	121
92	11	18	7	2	121
92	11	19	7	2	121
92	11	20	7	3	121
92	11	21	7	2	121

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
92	11	22	7	3	121
92	11	23	7	3	120.9
92	11	24	7	3	120.9
92	11	25	7	3	120.8
92	11	26	7	3	120.8
92	11	27	7	3	120.8
92	11	28	7	3	120.8
92	11	29	7	3	120.8
92	12	1	7	3	120.8
92	12	2	7	3	120.9
92	12	3	7	3	120.9
92	12	4	7	3	120.8
92	12	6	7	2	120.9
92	12	7	7	3	121
92	12	8	7	3	121
92	12	9	7	3	121
92	12	10	7	3	121
92	12	11	7	3	121
92	12	13	7	4	120.9
92	12	14	7	3	120.9
92	12	15	7	3	120.9
92	12	16	7	4	120.9
92	12	17	7	3	121
92	12	18	7	3	121
92	12	19	7	3	120.9
92	12	20	7	4	121
92	12	21	7	4	121
92	12	23	7	4	120.9
92	12	24	7	3	120.9
92	12	25	7	3	120.9
92	12	26	7	3	121
92	12	27	7	3	121
92	12	28	7	3	121
93	6	5	7	6	120.8
93	6	6	7	5	120.8
93	6	7	7	5	120.8
93	6	8	7	5	120.7
93	6	9	7	5	120.7
93	6	10	7	4	120.7
93	6	11	7	5	120.7
93	6	12	7	5	120.7
93	6	13	7	4	120.7
93	6	14	7	5	120.7
93	6	15	7	5	120.7
93	6	16	7	5	120.7
93	6	17	7	5	120.7

Data obtained from WHC Surveillance Computer System Analysis (SACS), November 16, 1993.

[illegible]

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Surface Level Data					
FIC					
Year	Month	Day	Hour	Minutes	Surface Level
91	10	31	6	2	65.2
91	11	1	7	2	65.2
91	11	2	7	3	65.2
91	11	3	7	3	65.3
91	11	4	7	2	65.3
91	11	5	7	3	65.3
91	11	6	7	3	65.3
91	11	7	7	2	65.3
91	11	8	7	3	65.3
91	11	9	7	2	65.3
91	11	10	7	3	65.3
91	11	11	7	10	65.3
92	7	7	7	6	65.2
92	7	8	7	6	65.2
92	7	9	7	6	65.2
92	7	10	7	6	65.2
92	7	11	7	6	65.3
92	7	12	7	6	65.3
92	7	13	7	6	65.2
92	7	14	7	6	65.2
92	7	15	7	6	65.2
92	7	16	7	6	65.2
92	7	17	7	6	65.3
92	7	18	7	6	65.3
92	7	19	7	6	65.3
92	7	20	6	6	65.3
92	7	25	4	6	65.2
92	8	26	7	3	65.3
92	8	27	7	4	65.3
92	8	28	7	2	65.3
92	8	29	7	2	65.3
92	8	30	7	2	65.3
92	8	31	7	2	65.3
92	9	1	7	2	65.3
92	9	2	7	2	65.3
92	9	9	6	3	65.3
92	9	10	7	3	65.3
92	9	17	7	6	65.3
92	9	18	7	6	65.3
92	9	21	7	6	65.3
92	9	22	7	3	65.3
92	9	23	7	3	65.3
92	9	24	7	3	65.3
92	9	25	7	3	65.3
92	9	26	7	2	65.3
92	9	27	7	2	65.3

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
92	9	28	7	2	65.3
92	9	29	7	3	65.3
92	9	30	7	2	65.3
92	10	1	7	3	65.3
92	10	2	7	2	65.3
92	10	3	7	3	65.3
92	10	4	7	3	65.3
92	10	5	7	3	65.3
92	10	6	7	3	65.3
92	10	8	7	2	65.4
92	10	9	7	3	65.3
92	10	10	7	3	65.3
92	10	11	7	3	65.3
92	10	14	7	3	65.3
92	10	15	7	4	65.3
92	10	16	7	3	65.3
92	10	17	7	3	65.3
92	10	18	7	3	65.4
92	10	19	7	3	65.3
92	10	20	7	3	65.4
92	10	21	7	3	65.3
92	10	24	7	3	65.3
92	10	25	7	3	65.3
92	10	27	7	4	65.3
92	10	28	7	3	65.4
92	10	29	7	3	65.4
92	10	30	7	3	65.4
92	10	31	7	3	65.3
92	11	1	7	3	65.3
92	11	2	7	3	65.3
92	11	3	7	3	65.2
92	11	4	7	3	65.3
92	11	10	7	3	65.3
92	11	11	7	4	65.3
92	11	12	7	3	65.3
92	11	13	7	4	65.3
92	11	14	7	4	65.3
92	11	15	7	4	65.3
92	11	16	7	4	65.4
92	11	17	7	4	65.4
92	11	18	7	2	65.3
92	11	19	7	2	65.4
92	11	20	7	3	65.3
92	11	21	7	2	65.3
92	11	22	7	3	65.3
92	11	23	7	3	65.2
92	11	24	7	3	65.2
92	11	25	7	3	65.2

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
92	11	26	7	3	65.2
92	11	27	7	3	65.3
92	11	28	7	3	65.3
92	11	29	7	3	65.3
92	12	1	7	3	65.3
92	12	2	7	3	65.4
92	12	3	7	3	65.3
92	12	4	7	3	65.3
92	12	6	7	2	65.3
92	12	7	7	3	65.4
92	12	8	7	3	65.4
92	12	9	7	3	65.3
92	12	10	7	3	65.3
92	12	11	7	3	65.3
92	12	13	7	4	65.2
92	12	14	7	3	65.3
92	12	15	7	3	65.3
92	12	16	7	4	65.3
92	12	17	7	3	65.3
92	12	18	7	3	65.3
92	12	19	7	3	65.2
92	12	20	7	4	65.3
92	12	21	7	4	65.3
92	12	23	7	4	65.2
92	12	24	7	3	65.3
92	12	25	7	3	65.3
92	12	26	7	3	65.3
92	12	27	7	3	65.3
92	12	28	7	3	65.4
93	5	19	7	3	65.2
93	5	20	7	3	65.2
93	5	22	7	3	65.1
93	5	23	7	4	65.2
93	5	24	7	3	65.2
93	5	25	7	3	65.2
93	5	26	7	3	65.2
93	5	27	7	3	65.2
93	5	28	7	3	65.2
93	5	29	7	5	65.2
93	5	30	7	5	65.2
93	5	31	7	6	65.2
93	6	1	7	6	65.2
93	6	2	7	6	65.2
93	6	3	7	6	65.2
93	6	4	7	6	65.2
93	6	5	7	6	65.2
93	6	6	7	5	65.2
93	6	7	7	5	65.2

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
93	6	8	7	5	65.1
93	6	9	7	5	65.2
93	6	10	7	4	65.2
93	6	11	7	5	65.2
93	6	12	7	5	65.2
93	6	13	7	4	65.2
93	6	14	7	5	65.2
93	6	15	7	5	65.2
93	6	16	7	5	65.2
93	6	17	7	5	65.2
93	6	18	7	6	65.2
93	6	25	7	3	65.2
93	6	26	7	3	65.3
93	6	27	7	4	65.2
93	6	28	7	3	65.2
93	6	29	7	4	65.2
93	6	30	7	3	65.2
93	7	1	7	6	65.2
93	7	2	7	6	65.3
93	7	3	7	3	65.3
93	7	4	7	4	65.2
93	7	5	7	3	65.2
93	7	6	7	3	65.2
93	7	7	7	4	65.2
93	7	8	7	4	65.3
93	7	9	7	5	65.3
93	7	10	7	3	65.2
93	7	11	7	3	65.2
93	7	12	7	2	65.2
93	7	13	7	3	65.3
93	7	14	7	6	65.3
93	7	15	7	6	65.3
93	7	16	7	6	65.3
93	7	17	7	7	65.3
93	7	18	7	6	65.3
93	7	19	7	3	65.3
93	7	20	7	3	65.3
93	7	21	7	3	65.3
93	7	22	7	3	65.3
93	7	23	7	3	65.3
93	7	24	7	3	65.3
93	7	26	7	3	65.3
93	7	27	7	3	65.3
93	7	28	7	4	65.3
93	7	29	7	3	65.3
93	7	30	7	3	65.2
93	7	31	7	3	65.2
93	8	1	7	3	65.2

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
93	8	2	7	6	65.3
93	8	3	7	3	65.3
93	8	4	7	3	65.3
93	8	5	7	4	65.3
93	8	7	7	4	65.3
93	8	8	6	4	65.3
93	8	9	7	4	65.3
93	8	10	7	4	65.3
93	8	11	7	4	65.3
93	8	12	7	4	65.3
93	8	13	7	4	65.3
93	8	14	7	3	65.3
93	8	15	7	4	65.3
93	8	16	7	4	65.3
93	8	17	7	4	65.3
93	8	18	7	3	65.3
93	8	19	7	4	65.3
93	8	20	7	4	65.3
93	8	21	7	4	65.3
93	8	22	7	4	65.3
93	8	23	6	3	65.3
93	8	24	7	4	65.3
93	8	25	7	4	65.3
93	8	26	7	4	65.3
93	8	27	7	5	65.3
93	8	28	7	4	65.3
93	8	29	7	3	65.3
93	8	30	7	4	65.3
93	8	31	7	4	65.3
93	9	1	7	4	65.3
93	9	30	7	3	65.4
93	10	1	7	6	65.3
93	10	2	7	5	65.3
93	10	3	7	6	65.3
93	10	4	7	6	65.4
93	10	5	7	6	65.4
93	10	6	7	6	65.4
93	10	7	7	5	65.3
93	10	8	7	4	65.3
93	10	9	7	3	65.3
93	10	10	7	10	65.4
93	10	11	7	3	65.4
93	10	12	7	4	65.4
93	10	13	7	3	65.4
93	10	14	7	4	65.4
93	10	15	7	4	65.4
93	10	16	7	4	66
93	10	17	7	3	66

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Surface Level Data					
Manual Tape					
Year	Month	Day	Hour	Minutes	Surface Level
91	1	2	15	25	68
91	1	19	15	25	68
91	1	29	15	25	68
91	2	5	8	20	68.25
91	3	4	14	56	68.25
91	4	1	15	24	68.25
91	5	7	13	24	68.25
91	6	3	14	56	68.25
91	7	3	14	56	68.25
91	8	3	14	56	68.25
91	8	5	18	12	68.25
91	9	3	14	56	68.25
91	10	3	14	56	68.25
91	11	4	14	56	68.5
91	11	7	14	56	68.25
91	12	2	14	56	68.25
92	1	1	15	15	68.25
92	2	25	15	15	68.25
92	3	4	8	32	68.25
92	4	1	14	49	68.25
92	5	6	7	52	68.25
92	6	1	15	28	68.5
92	7	2	15	33	68.25
92	8	3	17	27	68.25
92	9	8	23	5	68.5
92	10	6	6	53	68.5
92	10	26	19	18	68.5
92	11	2	15	20	68.5
92	12	1	14	43	68.5
93	1	4	10	0	68.5
93	2	1	10	0	68.5
93	2	3	2	28	68.5
93	3	1	17	22	68
93	4	2	15	30	68
93	6	1	14	48	68.5
93	7	1	14	49	68.5
93	8	2	14	39	68.5
93	8	11	13	44	68.75
93	8	12	13	32	68.75
93	8	13	14	6	68.75
93	8	14	15	18	68.75
93	8	15	17	4	68.75
93	8	17	13	51	68.5
93	8	18	14	47	68.5
93	8	19	14	20	68.5
93	8	20	11	18	69

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
93	8	21	13	37	68.7
93	8	22	14	21	68.75
93	8	23	12	28	68.75
93	8	24	15	50	68.75
93	8	24	21	56	68.75
93	8	25	17	5	68.5
93	8	26	15	17	68.5
93	8	27	18	40	68.75
93	8	28	15	27	68.75
93	8	30	17	1	68.5
93	8	31	22	1	68.25
93	9	29	16	38	68.7
93	9	30	21	35	69
93	10	1	20	50	68.75
93	10	2	22	58	69
93	10	4	23	24	68.75
93	10	5	13	46	68.75
93	10	6	21	13	68.75
93	10	8	20	30	68.75
93	10	9	21	15	69
93	10	10	22	18	68.5
93	10	12	19	6	68.5
93	10	13	21	54	68.75
93	10	14	17	39	69
93	10	15	20	3	68.75
93	10	16	20	14	68.75
93	10	17	14	0	69
93	10	18	21	13	68.75
93	10	19	21	19	68.75
93	10	20	21	44	68.75
93	10	21	21	52	68.75
93	10	23	20	54	68.25
93	10	26	21	32	68.5
93	10	27	21	20	68.75
93	10	28	15	22	68.75
93	10	29	15	44	68.75
93	10	30	14	23	68.75
93	10	31	13	13	68.75
93	11	1	15	44	68.75
93	11	3	16	58	68.75
93	11	4	17	35	68.5
93	11	5	14	31	68.75
93	11	6	14	15	68.75
93	11	7	13	57	68.5
93	11	8	14	38	68.75
93	11	9	14	51	68.75
93	11	10	14	33	68.5
93	11	11	15	39	68.75

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Surface Level Data					
Manual Tape					
Year	Month	Day	Hour	Minutes	Surface Level
91	1	2	8	11	79.5
91	1	7	14	33	79.75
91	1	14	15	11	79.75
91	1	19	15	25	79.75
91	1	21	1	31	79.5
91	1	28	15	8	79.5
91	1	29	8	11	79.5
91	2	4	15	28	79.75
91	2	12	16	39	79.75
91	2	18	18	25	79.75
91	2	25	15	12	79.75
91	3	4	14	56	79.75
91	3	11	16	42	80
91	3	18	17	25	80
91	3	25	15	1	79.5
91	4	1	15	24	79.5
91	4	8	17	53	79.75
91	4	15	15	23	80
91	4	22	15	3	79.75
91	4	29	17	17	80.25
91	4	30	19	23	79.75
91	5	7	14	38	79.5
91	5	13	14	54	79.5
91	5	20	14	57	79.5
91	5	27	14	41	79.5
91	6	3	14	56	79.25
91	6	10	14	55	80.25
91	6	17	15	8	80
91	6	24	18	8	80
91	7	1	14	23	80
91	7	8	14	23	79.5
91	7	15	14	23	79.5
91	7	22	21	50	79.5
91	7	31	0	22	79.5
91	8	5	18	12	79.75
91	8	12	19	26	79.75
91	8	19	14	58	79.75
91	9	2	14	57	79.75
91	9	9	14	57	79.5
91	9	16	14	57	79.75
91	9	23	14	57	79.5
91	9	30	14	57	79.5
91	10	7	14	57	79.5
91	10	14	14	57	80
91	10	21	14	57	79.75
91	10	28	14	57	79.5

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
91	11	4	14	57	79.5
91	11	11	14	57	80
91	11	18	14	57	79.75
91	11	25	14	57	79.75
91	12	2	14	57	79.75
91	12	9	14	57	79.75
91	12	16	14	57	79.5
91	12	23	14	57	79.75
91	12	30	14	57	79.75
92	1	6	22	41	79.75
92	1	13	22	41	79.5
92	1	21	22	41	79.5
92	1	27	22	41	79.75
92	2	24	22	41	79.5
92	3	4	8	32	79.75
92	3	11	8	23	79.5
92	3	16	16	33	80
92	3	23	15	29	79.5
92	3	30	15	33	80
92	4	6	17	57	79.75
92	4	15	15	1	79.75
92	4	20	16	29	79.5
92	4	27	22	5	80
92	5	6	7	52	79.75
92	5	11	15	27	79.5
92	5	20	8	15	79.5
92	5	25	15	27	79.5
92	6	1	15	28	79.25
92	6	8	15	25	79.75
92	6	15	15	16	79.5
92	6	25	7	36	79.75
92	7	6	16	47	79.75
92	7	13	15	21	79.5
92	7	21	15	19	79
92	7	28	14	31	79.75
92	8	3	17	27	79.75
92	8	10	15	22	79.75
92	8	17	15	30	79.75
92	8	24	15	2	79.75
92	9	1	15	25	80
92	9	8	23	5	79.75
92	9	23	15	45	79.75
92	9	28	19	52	80
92	10	5	6	53	79.75
92	10	12	6	53	79.75
92	10	19	15	15	80
92	10	26	15	40	80
92	11	2	15	20	79.5

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
92	11	9	15	20	80
92	11	16	19	44	79.75
92	11	23	7	57	79.5
92	12	1	14	43	79.25
92	12	7	17	40	79.75
92	12	14	14	4	79.75
92	12	21	20	48	79.5
92	12	28	22	13	79.5
93	1	4	15	2	79.5
93	1	11	15	2	79.25
93	1	18	20	43	79.25
93	1	25	22	57	78.75
93	2	1	10	0	79
93	2	8	10	0	79
93	2	16	10	0	78.5
93	2	17	10	0	79
93	2	22	10	0	78.5
93	3	1	17	22	78.5
93	3	8	10	0	79
93	3	15	17	24	79
93	3	22	17	24	78.75
93	3	23	17	24	79
93	3	24	23	14	79
93	3	26	9	40	78.75
93	3	27	15	2	79
93	3	28	15	2	79
93	3	29	14	18	79
93	3	30	22	22	78.75
93	3	31	22	22	78.75
93	4	1	15	25	79
93	4	2	15	30	79
93	4	3	15	25	79
93	4	4	8	17	79
93	4	5	15	25	78.75
93	4	6	15	25	78.75
93	4	7	8	4	78.75
93	4	8	15	17	78.75
93	4	9	21	13	79
93	4	10	15	30	79
93	4	11	14	27	79
93	4	12	17	37	79
93	4	13	17	37	79
93	4	14	20	20	79
93	4	15	20	20	79
93	4	16	20	20	79
93	4	17	20	20	79
93	4	18	15	13	79
93	4	19	15	13	79

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
93	4	20	15	13	79
93	4	21	15	13	78.75
93	4	22	14	34	78.75
93	4	23	14	34	79
93	4	24	13	14	79
93	4	25	13	23	79
93	4	26	19	2	78.5
93	4	27	14	31	79
93	4	28	14	57	79
93	4	29	22	41	79
93	4	30	17	24	79
93	5	1	14	17	79
93	5	2	11	15	79
93	5	3	11	15	79
93	5	4	11	15	79
93	5	5	11	15	79
93	5	6	18	26	79
93	5	7	18	26	79
93	5	8	18	26	79
93	5	9	18	26	79
93	5	10	18	26	79
93	5	11	15	14	79
93	5	12	17	29	79
93	5	13	17	29	79
93	5	14	17	29	79
93	5	15	17	29	79
93	5	16	17	29	79
93	5	17	17	29	79
93	5	18	17	29	79
93	5	19	14	3	79
93	5	20	15	23	79
93	5	21	15	44	79
93	5	22	13	17	79
93	5	23	12	38	79
93	5	24	14	14	79
93	5	25	14	57	79
93	5	26	14	53	79
93	5	27	15	13	79
93	5	28	13	26	79
93	5	29	13	26	79
93	5	30	13	26	79.25
93	6	1	1	53	79
93	6	2	14	28	79
93	6	3	14	54	79
93	6	4	14	50	79
93	6	5	15	32	79
93	6	6	12	38	79
93	6	7	17	23	79

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
93	6	8	16	40	79
93	6	9	17	43	79
93	6	10	13	51	79
93	6	11	4	49	79
93	6	12	16	35	79
93	6	13	15	25	79
93	6	14	14	51	79
93	6	15	13	51	79
93	6	16	14	40	78.75
93	6	17	13	51	79
93	6	18	13	51	79
93	6	19	13	51	79
93	6	20	13	51	79
93	6	29	15	5	79
93	6	30	14	42	79
93	7	1	14	49	79
93	7	2	22	59	79
93	7	2	23	31	79
93	7	3	22	56	79
93	7	4	18	1	79
93	7	5	20	17	79
93	7	6	11	2	79
93	7	7	13	51	79
93	7	8	13	5	79
93	7	9	13	40	79
93	7	11	13	27	79.25
93	7	12	15	14	79
93	7	14	19	11	78.75
93	7	16	15	16	79
93	7	17	15	17	79
93	7	18	14	38	79
93	7	19	14	40	79
93	7	20	14	39	79
93	7	21	23	11	79
93	7	22	14	29	79
93	7	23	18	12	79
93	7	24	14	34	79.25
93	7	25	19	38	79
93	7	26	15	1	79
93	7	27	13	59	79
93	7	29	19	47	79
93	7	30	13	0	79
93	7	31	18	20	79
93	8	1	14	39	79
93	8	2	14	39	79
93	8	3	14	31	79
93	8	4	17	41	79
93	8	5	14	39	79

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
93	8	6	15	50	79
93	8	7	13	30	79.5
93	8	8	15	0	79.5
93	8	9	14	56	79
93	8	10	16	19	79
93	8	24	21	56	79
93	9	10	16	19	79.75
93	9	11	16	19	79.75
93	9	12	16	19	79.75
93	9	13	16	19	80
93	9	14	16	19	80
93	9	15	16	19	80
93	9	16	16	19	80
93	9	17	16	19	80
93	9	18	16	19	80
93	9	19	16	19	80
93	9	20	16	19	79.75
93	9	21	16	19	80
93	9	22	16	19	80
93	9	23	16	19	80
93	9	24	16	19	80
93	9	25	16	19	79.75
93	9	26	16	19	80
93	9	27	16	19	79.75
93	9	28	16	19	79.75
93	9	29	16	19	79.75
93	9	30	21	35	80
93	10	1	20	50	79.75
93	10	2	22	58	79.75
93	10	3	23	24	80
93	10	4	23	24	80
93	10	5	19	5	80
93	10	6	19	5	80
93	10	7	22	58	79.75
93	10	8	20	30	80
93	10	9	21	15	80
93	10	10	22	18	80
93	10	11	0	19	80
93	10	12	0	19	80
93	10	13	21	54	80
93	10	14	17	39	79.5
93	10	15	20	3	79.75
93	10	16	20	12	79.75
93	10	17	14	0	80
93	10	17	20	55	80
93	10	18	21	13	80
93	10	19	21	19	80
93	10	20	21	44	80

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Surface Level Data					
FIC					
Year	Month	Day	Hour	Minutes	Surface Level
91	1	1	7	3	55.3
91	1	2	7	2	55.3
91	1	3	7	3	55.3
91	1	4	7	2	55.3
91	1	5	7	2	55.3
91	1	6	7	2	55.3
91	1	7	7	2	55.3
91	1	8	7	3	55.3
91	1	9	7	2	55.3
91	1	10	7	2	55.3
91	1	11	7	3	55.3
91	1	12	6	2	55.3
91	1	13	7	3	55.3
91	1	14	7	4	55.3
91	1	15	7	3	55.3
91	1	16	7	4	55.3
91	1	17	7	4	55.3
91	1	18	7	4	55.3
91	1	22	7	4	55.3
91	1	23	7	4	55.3
91	1	24	7	4	55.3
91	1	25	7	3	55.3
91	1	26	7	3	55.3
91	1	27	7	3	55.3
91	1	28	7	10	55.3
91	1	29	7	2	55.3
91	1	30	7	10	55.3
91	1	31	7	2	55.3
91	2	1	7	2	55.3
91	2	2	7	4	55.3
91	2	3	7	3	55.2
91	2	4	7	3	55.2
91	2	5	7	4	55.2
91	2	6	7	4	55.2
91	2	7	7	4	55.2
91	2	8	7	4	55.2
91	2	9	7	4	55.2
91	2	10	7	3	55.2
91	2	11	7	4	55.2
91	2	12	7	4	55.2
91	2	13	7	4	55.2
91	2	14	7	4	55.2
91	2	15	7	3	55.2
91	2	16	7	2	55.2
91	2	17	7	2	55.2
91	2	18	7	3	55.2

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
91	2	19	7	2	55.2
91	2	20	7	3	55.2
91	2	21	7	2	55.2
91	2	22	7	2	55.2
91	2	23	7	2	55.2
91	2	24	7	3	55.2
91	2	25	7	3	55.2
91	2	26	7	3	55.2
91	2	27	7	2	55.2
91	2	28	7	2	55.2
91	3	1	7	2	55.2
91	3	2	7	2	55.2
91	3	3	7	3	55.2
91	3	4	7	3	55.2
91	3	5	7	3	55.2
91	3	6	7	2	55.2
91	3	7	7	2	55.2
91	3	8	7	2	55.2
91	3	9	7	2	55.2
91	3	10	7	2	55.2
91	3	11	7	2	55.2
91	3	12	7	3	55.2
91	3	13	7	3	55.2
91	3	14	7	3	55.2
91	3	15	7	3	55.2
91	3	16	7	3	55.2
91	3	17	7	2	55.2
91	3	18	7	3	55.2
91	3	19	7	3	55.2
91	3	20	7	2	55.2
91	3	21	7	3	55.2
91	3	22	7	2	55.2
91	3	23	7	3	55.2
91	3	24	7	3	55.2
91	3	25	7	3	55.2
91	3	26	7	3	55.2
91	3	27	7	3	55.2
91	3	28	7	3	55.2
91	3	29	7	3	55.2
91	3	30	7	3	55.2
91	3	31	7	3	55.2
91	4	1	7	3	55.2
91	4	2	7	3	55.2
91	4	3	7	3	55.2
91	4	4	7	3	55.2
91	4	5	7	3	55.2
91	4	6	7	3	55.2
91	4	7	7	3	55.2

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
91	4	8	7	4	55.2
91	4	9	7	3	55.2
91	4	10	7	3	55.2
91	4	11	7	3	55.2
91	4	12	7	3	55.2
91	4	13	7	4	55.2
91	4	14	7	3	55.2
91	4	15	7	3	55.2
91	4	16	7	10	55.2
91	4	17	7	3	55.2
91	4	18	7	6	55.2
91	4	19	7	5	55.2
91	4	20	7	6	55.2
91	4	21	7	5	55.2
91	4	22	7	6	55.2
91	4	23	7	6	55.2
91	4	24	6	6	55.2
91	4	25	7	5	55.2
91	4	26	7	5	55.2
91	4	27	7	5	55.2
91	4	28	7	6	55.2
91	4	29	7	5	55.2
91	4	30	7	6	55.2
91	5	1	7	5	55.2
91	5	2	7	5	55.2
91	5	3	7	6	55.2
91	5	4	7	5	55.2
91	5	5	7	5	55.2
91	5	6	7	5	55.2
91	5	7	7	5	55.2
91	5	8	7	5	55.2
91	5	9	7	5	55.2
91	5	10	7	5	55.2
91	5	11	7	5	55.2
91	5	12	7	5	55.2
91	5	13	7	5	55.2
91	5	14	7	5	55.2
91	5	15	6	5	55.2
91	5	16	7	6	55.2
91	5	17	7	6	55.2
91	5	18	7	6	55.2
91	5	19	7	5	55.2
91	5	20	6	6	55.2
91	5	21	7	6	55.2
91	5	22	7	5	55.2
91	5	23	7	5	55.2
91	5	24	7	5	55.2
91	5	25	7	5	55.2

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
91	5	26	7	5	55.2
91	5	27	7	5	55.2
91	5	28	6	5	55.2
91	5	29	7	5	55.2
91	5	30	7	5	55.2
91	5	31	7	5	55.2
91	6	1	7	5	55.2
91	6	2	7	5	55.2
91	6	3	7	5	55.2
91	6	4	7	5	55.2
91	6	5	7	5	55.2
91	6	6	7	6	55.2
91	6	11	7	5	55.2
91	6	12	7	4	55.2
91	6	13	7	5	55.2
91	6	14	7	5	55.2
91	6	15	7	5	55.2
91	6	16	7	5	55.2
91	6	17	7	5	55.2
91	6	18	7	5	55.2
91	6	19	7	5	55.2
91	6	20	7	5	55.2
91	6	21	7	6	55.2
91	6	22	7	5	55.2
91	6	23	7	5	55.2
91	6	24	7	5	55.2
91	6	25	7	6	55.2
91	6	26	7	3	55.2
91	6	27	7	2	55.2
91	6	28	7	3	55.2
91	6	29	7	2	55.2
91	7	16	7	6	55.2
91	7	17	7	5	55.2
91	7	18	7	5	55.2
91	7	19	7	5	55.2
91	7	20	7	5	55.2
91	7	21	7	5	55.2
91	7	22	7	5	55.2
91	7	23	7	5	55.2
91	7	24	6	5	55.2
91	7	25	7	1	55.2
91	7	26	7	2	55.2
91	7	27	7	2	55.2
91	7	28	7	2	55.2
91	7	29	7	2	55.2
91	7	30	7	2	55.2
91	7	31	7	2	55.2
91	10	31	6	2	55.3

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
91	11	1	7	2	55.3
91	11	2	7	3	55.3
91	11	3	7	3	55.3
91	11	4	7	2	55.3
91	11	5	7	3	55.4
91	11	6	7	3	55.4
91	11	7	7	2	55.4
91	11	8	7	3	55.4
91	11	9	7	2	55.4
91	11	10	7	3	55.4
91	11	11	7	10	55.4
91	11	12	7	3	55.4
91	11	13	7	3	55.4
91	11	14	7	3	55.4
91	11	15	7	3	55.4
91	11	16	7	3	55.4
91	11	17	7	2	55.4
91	11	18	7	3	55.4
91	11	19	7	3	55.3
91	11	20	7	3	55.4
91	11	21	7	2	55.3
91	11	22	7	3	55.3
91	11	23	7	2	55.3
91	11	24	7	3	55.3
91	11	25	7	3	55.4
91	11	27	7	3	55.4
91	11	28	7	3	55.3
91	11	29	7	3	55.3
91	11	30	7	3	55.3
91	12	1	7	3	55.3
91	12	2	7	3	55.3
91	12	3	7	3	55.3
91	12	4	7	3	55.4
91	12	5	7	3	55.4
91	12	6	6	3	55.4
91	12	7	7	3	55.4
91	12	8	7	3	55.3
91	12	9	7	3	55.3
91	12	10	7	3	55.3
91	12	11	7	2	55.4
91	12	12	7	3	55.4
91	12	13	7	5	55.3
91	12	14	7	2	55.3
91	12	15	7	2	55.3
91	12	16	7	3	55.3
91	12	17	7	6	55.3
91	12	18	7	3	55.4
91	12	19	7	3	55.3

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
91	12	20	7	2	55.3
91	12	21	7	3	55.3
91	12	22	7	5	55.3
91	12	23	7	6	55.3
91	12	24	7	3	55.3
91	12	25	7	3	55.3
91	12	26	7	3	55.3
91	12	27	7	3	55.3
91	12	28	7	2	55.4
91	12	29	7	3	55.3
91	12	30	7	3	55.3
91	12	31	7	3	55.3
92	1	1	7	3	55.3
92	1	2	7	2	55.3
92	1	3	7	4	55.3
92	1	4	7	3	55.3
92	1	5	7	3	55.3
92	1	6	7	3	55.3
92	1	7	7	4	55.3
92	1	8	7	3	55.3
92	1	9	7	3	55.3
92	1	10	7	4	55.3
92	1	11	7	4	55.3
92	1	15	7	3	55.3
92	1	16	7	4	55.3
92	1	17	7	4	55.3
92	1	18	7	4	55.3
92	1	19	7	3	55.3
92	1	20	7	3	55.3
92	1	21	7	3	55.3
92	1	22	7	6	55.3
92	1	23	7	3	55.3
92	1	24	7	2	55.3
92	1	25	7	3	55.3
92	1	26	7	10	55.3
92	1	27	7	2	55.3
92	1	28	7	3	55.3
92	1	29	7	3	55.3
92	1	30	5	3	55.3
92	1	31	7	3	55.3
92	2	1	7	2	55.3
92	2	2	7	3	55.3
92	2	3	7	3	55.3
92	2	4	7	3	55.3
92	2	5	7	2	55.3
92	2	8	7	4	55.3
92	2	9	7	3	55.3
92	2	10	7	4	55.3

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
92	2	11	7	3	55.3
92	2	12	7	3	55.3
92	2	13	7	3	55.3
92	2	14	7	3	55.3
92	2	15	7	3	55.3
92	2	16	7	3	55.3
92	2	17	7	3	55.3
92	2	18	6	2	55.3
92	2	19	7	3	55.3
92	2	20	7	3	55.3
92	2	21	7	3	55.3
92	2	22	7	3	55.3
92	2	23	7	3	55.2
92	2	24	7	3	55.2
92	2	25	7	4	55.2
92	2	26	7	3	55.2
92	2	27	7	4	55.2
92	2	28	7	4	55.3
92	2	29	7	3	55.3
92	3	1	7	3	55.3
92	3	2	7	3	55.3
92	3	3	7	4	55.3
92	3	4	7	4	55.3
92	3	5	7	3	55.3
92	3	6	7	3	55.3
92	3	7	7	2	55.3
92	3	8	7	2	55.3
92	3	9	7	2	55.3
92	3	10	7	3	55.3
92	3	11	7	3	55.3
92	3	12	7	3	55.3
92	3	13	7	3	55.3
92	3	14	7	3	55.3
92	3	15	7	6	55.3
92	3	16	7	3	55.3
92	3	17	7	3	55.3
92	3	18	7	3	55.3
92	3	19	7	3	55.3
92	3	20	7	2	55.3
92	3	21	7	3	55.3
92	3	22	7	2	55.3
92	3	23	7	2	55.3
92	3	24	7	2	55.3
92	3	25	7	3	55.3
92	3	26	7	3	55.3
92	3	27	7	2	55.3
92	3	28	7	3	55.3
92	3	29	7	3	55.3

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
92	3	30	7	3	55.3
92	3	31	7	3	55.2
92	4	1	7	3	55.2
92	4	2	7	3	55.3
92	4	3	7	3	55.3
92	4	4	7	3	55.3
92	4	5	7	3	55.3
92	4	6	7	3	55.2
92	4	7	7	3	55.2
92	4	8	7	10	55.2
92	4	9	7	3	55.3
92	4	10	7	3	55.3
92	4	11	7	3	55.3
92	4	12	7	4	55.3
92	4	13	7	3	55.3
92	4	14	7	3	55.2
92	4	15	7	2	55.3
92	4	16	7	3	55.3
92	4	17	7	3	55.3
92	4	18	7	2	55.2
92	4	19	7	2	55.2
92	4	20	7	3	55.2
92	4	21	7	3	55.2
92	4	22	7	2	55.2
92	4	23	7	3	55.2
92	4	24	7	3	55.2
92	4	25	7	4	55.2
92	4	26	7	3	55.3
92	4	27	7	4	55.2
92	4	28	7	3	55.2
92	4	29	7	3	55.3
92	4	30	7	3	55.3
92	5	1	7	3	55.2
92	5	2	7	3	55.2
92	5	3	7	3	55.2
92	5	4	7	3	55.2
92	5	5	7	4	55.2
92	5	6	7	3	55.3
92	5	7	7	4	55.3
92	5	8	7	3	55.3
92	5	9	7	4	55.3
92	5	10	7	4	55.3
92	5	11	6	3	55.2
92	5	12	7	3	55.2
92	5	13	7	3	55.2
92	5	14	7	3	55.3
92	5	15	7	3	55.3
92	5	16	7	3	55.2

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
92	5	17	7	2	55.3
92	5	18	7	3	55.3
92	5	19	7	3	55.3
92	5	20	7	3	55.3
92	5	21	7	3	55.2
92	5	22	7	2	55.2
92	5	23	7	3	55.2
92	5	24	7	3	55.3
92	5	25	7	3	55.3
92	5	27	6	3	55.3
92	5	28	7	2	55.3
92	5	29	7	2	55.3
92	5	30	7	3	55.3
92	5	31	7	3	55.3
92	6	1	7	3	55.3
92	6	2	7	3	55.3
92	6	3	7	3	55.3
92	6	4	7	3	55.3
92	6	5	7	2	55.3
92	6	6	7	3	55.3
92	6	7	7	3	55.3
92	6	8	7	3	55.3
92	6	9	7	3	55.3
92	6	10	7	3	55.3
92	6	11	7	3	55.3
92	6	12	7	5	55.3
92	6	13	7	5	55.3
92	6	15	7	3	55.3
92	6	16	7	3	55.3
92	6	17	7	3	55.3
92	6	18	7	3	55.3
92	6	19	7	2	55.3
92	6	20	7	2	55.3
92	6	21	7	3	55.3
92	6	22	7	3	55.3
92	6	23	7	3	55.3
92	6	24	7	3	55.3
92	6	25	7	3	55.3
92	6	26	7	2	55.3
92	6	27	7	3	55.3
92	6	28	7	6	55.3
92	6	29	7	6	55.3
92	6	30	7	6	55.3
92	7	3	7	6	55.3
92	7	4	7	6	55.3
92	7	5	7	6	55.3
92	7	6	7	6	55.3
92	7	7	7	6	55.3

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
92	7	8	7	6	55.3
92	7	9	7	6	55.3
92	7	10	7	6	55.3
92	7	11	7	6	55.3
92	7	12	7	6	55.3
92	7	13	7	6	55.3
92	7	14	7	6	55.3
92	7	15	7	6	55.3
92	7	16	7	6	55.3
92	7	17	7	6	55.3
92	7	18	7	6	55.3
92	7	19	7	6	55.3
92	7	20	6	6	55.3
92	7	25	4	6	55.3
92	8	26	7	3	55.3
92	8	27	7	4	55.3
92	8	28	7	2	55.3
92	8	29	7	2	55.3
92	8	30	7	2	55.3
92	8	31	7	2	55.3
92	9	1	7	2	55.3
92	9	2	7	2	55.3
92	9	9	6	3	55.3
92	9	10	7	3	55.3
92	9	17	7	6	55.3
92	9	18	7	6	55.3
92	9	21	7	6	55.4
92	9	22	7	3	55.4
92	9	23	7	3	55.4
92	9	24	7	3	55.4
92	9	25	7	3	55.3
92	9	26	7	2	55.3
92	9	27	7	2	55.3
92	9	28	7	2	55.3
92	9	29	7	3	55.3
92	9	30	7	2	55.4
92	10	1	7	3	55.4
92	10	2	7	2	55.4
92	10	3	7	3	55.4
92	10	4	7	3	55.3
92	10	5	7	3	55.3
92	10	6	7	3	55.3
92	10	8	7	2	55.4
92	10	9	7	3	55.4
92	10	10	7	3	55.4
92	10	11	7	3	55.4
92	10	14	7	3	55.4
92	10	15	7	4	55.3

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
92	10	16	7	3	55.4
92	10	17	7	3	55.4
92	10	18	7	3	55.4
92	10	19	7	3	55.4
92	10	20	7	3	55.4
92	10	21	7	3	55.4
92	10	24	7	3	55.4
92	10	25	7	3	55.4
92	10	27	7	4	55.3
92	10	28	7	3	55.4
92	10	29	7	3	55.4
92	10	30	7	3	55.4
92	10	31	7	3	55.4
92	11	1	7	3	55.4
92	11	2	7	3	55.3
92	11	3	7	3	55.3
92	11	4	7	3	55.3
92	11	10	7	3	55.3
92	11	11	7	4	55.3
92	11	12	7	3	55.3
92	11	13	7	4	55.3
92	11	14	7	4	55.3
92	11	15	7	4	55.3
92	11	16	7	4	55.4
92	11	17	7	4	55.4
92	11	18	7	2	55.4
92	11	19	7	2	55.4
92	11	20	7	3	55.3
92	11	21	7	2	55.4
92	11	22	7	3	55.4
92	11	23	7	3	55.3
92	11	24	7	3	55.3
92	11	25	7	3	55.3
92	11	26	7	3	55.3
92	11	27	7	3	55.3
92	11	28	7	3	55.3
92	11	29	7	3	55.3
92	12	1	7	3	55.3
92	12	2	7	3	55.3
92	12	3	7	3	55.3
92	12	4	7	3	55.3
92	12	6	7	2	55.3
92	12	7	7	3	55.4
92	12	8	7	3	55.4
92	12	9	7	3	55.3
92	12	10	7	3	55.3
92	12	11	7	3	55.3
92	12	13	7	4	55.3

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
92	12	14	7	3	55.3
92	12	15	7	3	55.3
92	12	16	7	4	55.3
93	5	19	7	3	55.2
93	5	20	7	3	55.1
93	5	22	7	3	55.1
93	5	23	7	4	55.1
93	5	24	7	3	55.1
93	5	25	7	3	55.1
93	5	26	7	3	55.1
93	5	27	7	3	55.1
93	5	28	7	3	55.1
93	5	29	7	5	55.1
93	5	30	7	5	55.1
93	5	31	7	6	55.1
93	6	1	7	6	55.1
93	6	2	7	6	55.1
93	6	3	7	6	55.1
93	6	4	7	6	55.1
93	6	5	7	6	55.2
93	6	6	7	5	55.2
93	6	7	7	5	55.1
93	6	8	7	5	55.1
93	6	9	7	5	55.1
93	6	10	7	4	55.1
93	6	11	7	5	55.1
93	6	12	7	5	55.1
93	6	13	7	4	55.1
93	6	14	7	5	55.1
93	6	15	7	5	55.1
93	6	16	7	5	55.1
93	6	17	7	5	55.1
93	6	18	7	6	55.1
93	6	25	7	3	55.1
93	6	26	7	3	55.1
93	6	27	7	4	55.1
93	6	28	7	3	55.1
93	6	29	7	4	55.1
93	6	30	7	3	55.1
93	7	1	7	6	55.1
93	7	2	7	6	55.1
93	7	3	7	3	55.1
93	7	4	7	4	55.1
93	7	5	7	3	55.1
93	7	6	7	3	55.1
93	7	7	7	4	55.1
93	7	8	7	4	55.1
93	7	9	7	5	55.1

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
93	7	10	7	3	55.1
93	7	11	7	3	55.1
93	7	12	7	2	55.1
93	7	13	7	3	55.1
93	7	14	7	6	55.1
93	7	15	7	6	55.1
93	7	16	7	6	55.1
93	7	17	7	7	55.1
93	7	18	7	6	55.1
93	7	19	7	3	55.1
93	7	20	7	3	55.2
93	7	21	7	3	55.2
93	7	22	7	3	55.2
93	7	23	7	3	55.2
93	7	24	7	3	55.1
93	7	26	7	3	55.1
93	7	27	7	3	55.2
93	7	28	7	4	55.2
93	7	29	7	3	55.1
93	7	30	7	3	55.1
93	7	31	7	3	55.1
93	8	1	7	3	55.1
93	8	2	7	6	55.1
93	8	3	7	3	55.1
93	8	4	7	3	55.1
93	8	5	7	4	55.1
93	8	7	7	4	55.2
93	8	8	6	4	55.2
93	8	9	7	4	55.1
93	8	10	7	4	55.1
93	8	11	7	4	55.1
93	8	12	7	4	55.1
93	8	13	7	4	55.1
93	8	14	7	3	55.1
93	8	15	7	4	55.2
93	8	16	7	4	55.2
93	8	17	7	4	55.1
93	8	18	7	3	55.1
93	8	19	7	4	55.1
93	8	20	7	4	55.2
93	8	21	7	4	55.1
93	8	22	7	4	55.1
93	8	23	6	3	55.1
93	8	24	7	4	55.1
93	8	25	7	4	55.1
93	8	26	7	4	55.1
93	8	27	7	5	55.1
93	8	28	7	4	55.1

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Year	Month	Day	Hour	Minutes	Surface Level
93	8	29	7	3	55.1
93	8	30	7	4	55.1
93	8	31	7	4	55.1
93	9	1	7	4	55.1
93	9	30	7	3	55.1
93	10	1	7	6	55.1
93	10	2	7	5	55.1
93	10	3	7	6	55.1
93	10	4	7	6	55.1
93	10	5	7	6	55.1
93	10	6	7	6	55.1
93	10	7	7	5	55.1
93	10	8	7	4	55.1
93	10	9	7	3	55.1
93	10	10	7	10	55.1
93	10	11	7	3	55.1
93	10	12	7	4	55.1
93	10	13	7	3	55.1
93	10	14	7	4	55.1
93	10	15	7	4	55.1
93	10	16	7	4	55.1
93	10	17	7	3	55.1
93	10	18	7	4	55.1
93	10	19	7	4	55.1
93	10	20	7	3	55.1
93	10	21	7	4	55.1
93	10	22	7	4	55.1
93	10	23	7	4	55.1
93	10	24	7	4	55.1
93	10	26	7	10	55
93	10	27	7	4	55
93	10	28	7	4	55.1
93	10	29	7	10	55
93	10	30	7	4	55.1
93	10	31	7	6	55.1
93	11	1	7	6	55
93	11	3	7	6	55
93	11	5	7	6	55
93	11	6	7	6	55
93	11	7	7	6	55
93	11	8	7	6	55
93	11	9	7	3	55
93	11	10	7	4	55
93	11	11	7	4	55
93	11	12	7	4	55
93	11	13	7	4	55
93	11	14	7	3	55
93	11	15	7	4	55

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.

Data obtained from WHC Surveillance Analysis Computer System (SACS), November 16, 1993.
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241-BX-Farm Drywell Activity
Well #21-00-21 Well Depth 150'
Scintillation Probe 1st Peak

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

**241-BX-101 Drywell Activity
Well #21-01-01 Well Depth 100'
Scintillation Probe**

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

241-BX-101 Drywell Activity
Well #21-01-02 Well Depth 100'
Scintillation Probe 1st Peak

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

241-BX-102 Drywell Activity
Well #21-02-03 Well Depth 100'
Scintillation Probe 1st Peak

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

241-BX-102 Drywell Activity
Well #21-02-03 Well Depth 100'
Scintillation Probe 2nd Peak

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

241-BX-102 Drywell Activity
Well #21-02-04 Well Depth 255'
GM # 2 Probe

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

241-BX-102 Drywell Activity
Well #21-02-06 Well Depth 100'
Scintillation Probe

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

241-BX-103 Drywell Activity
Well #21-03-12 Well Depth 100'
Scintillation Probe

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

241-BX-106 Drywell Activity
Well #21-06-05 Well Depth 100'
Scintillation Probe 1st Peak

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

241-BX-106 Drywell Activity
Well #21-06-05 Well Depth 100'
Scintillation Probe 2nd Peak

— Peak C/S — Depth ft.

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

**241-BX-106 Drywell Activity
Well #21-06-05 Well Depth 100'
Scintillation Probe 3rd Peak**

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

241-BX-107 Drywell Activity
Well #21-07-06 Well Depth 100'
GM # 1 Probe 1st Peak

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Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

Graph not to scale with others.

241-BX-107 Drywell Activity
Well #21-07-06 Well Depth 100'
GM # 1 Probe 2nd Peak

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

241-BX-107 Drywell Activity
Well #21-07-06 Well Depth 100'
GM # 1 Probe 3rd Peak

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

241-BX-107 Drywell Activity
Well #21-07-06 Well Depth 100'
GM # 2 Probe 1st Peak

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

241-BX-107 Drywell Activity
Well #21-07-06 Well Depth 100'
GM # 2 Probe 2nd Peak

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

241-BX-107 Drywell Activity
Well #21-07-06 Well Depth 100'
GM # 2 Probe 3rd Peak

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

241-BX-107 Drywell Activity
Well #21-07-06 Well Depth 100'
Scintillation Probe

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Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

Graph not to scale with others.

241-BX-108 Drywell Activity
Well #21-08-07 Well Depth 100'
Scintillation Probe

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

241-BX-110 Drywell Activity
Well #21-10-01 Well Depth 100'
Scintillation Probe

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

241-BX-110 Drywell Activity
Well #21-10-03 Well Depth 100'
GM # 1 Probe 1st Peak

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

241-BX-110 Drywell Activity
Well #21-10-03 Well Depth 100'
GM # 1 Probe 2nd Peak

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

241-BX-110 Drywell Activity
Well #21-10-03 Well Depth 100'
GM # 1 Probe 3rd Peak

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

241-BX-110 Drywell Activity
Well #21-10-03 Well Depth 100'
GM # 2 Probe

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

241-BX-110 Drywell Activity
Well #21-10-03 Well Depth 100'
Scintillation Probe

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

241-BX-110 Drywell Activity
Well #21-10-05 Well Depth 100'
GM # 1 Probe

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

Graph not to scale with others.

WHC-SD-WM-ER-311, Rev. 0

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Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

[illegible]

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

[illegible]

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

[illegible]

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

[illegible]

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

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[illegible]

Data obtained from WHO Surveillance Data Acquisition (SDA), November 30, 1993.

[illegible]

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

[illegible]

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

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[illegible]

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

241-BX-107 DRYWELL ACTIVITY						
WELL #21-07-06 WELL DEPTH 100'						
GM # 1 PROBE 1st Peak						
Date	Peak C/S	Depth ft.		Date	Peak C/S	Depth ft.
1/16/90	22670	44		1/14/93	21685	44
2/13/90	21517	44		2/9/93	20535	44
3/13/90	23349	44		3/10/93	24406	44
4/11/90	23359	41		4/7/93	22711	44
5/7/90	22371	44		5/4/93	24026	44
6/6/90	23732	44		5/17/93	23604	44
*7/2/90	2283	32		5/24/93	23761	45
7/3/90	26577	45		6/2/93	24278	44
7/31/90	24250	44		6/9/93	26278	44
*8/30/90	25348	44		6/28/93	24871	44
8/30/90	25109	44		7/7/93	24691	44
9/28/90	25576	44		*7/14/93	0	101
10/23/90	23842	45		7/15/93	11769	46
11/19/90	24262	44		7/21/93	11409	46
12/18/90	22909	44		7/28/93	26333	44
*1/17/91	2887	31		8/10/93	13353	47
1/17/91	13764	46		8/18/93	25604	44
1/21/91	25248	44		8/24/93	25234	44
*2/15/91	3569	41		9/2/93	19153	41
2/16/91	24063	44		9/9/93	24271	44
3/13/91	24559	44		9/15/93	24529	44
4/10/91	24695	44		9/23/93	24579	45
*5/6/91	24673	45		9/29/93	25404	44
5/6/91	24422	45		10/5/93	25550	44
*6/3/91	23796	45		10/14/93	25730	44
6/3/91	23754	45		10/20/93	24490	44
7/2/91	24322	44		10/26/93	23658	44
7/31/91	24929	44		*11/9/93	215700	35
8/30/91	24933	44		*11/11/93	1781	41
9/25/91	24527	45		11/12/93	23946	45
10/23/91	23913	45				
11/20/91	24335	44				
1/15/92	20120	44				
2/15/92	24744	44				
3/10/92	23180	44				
4/9/92	20079	44				
5/7/92	23981	44				
6/4/92	23940	44				
6/29/92	23816	44				
7/29/92	23435	44				
8/25/92	25374	45				
9/22/92	23837	44				
10/23/92	24909	44				
11/19/92	22788	45				
12/15/92	21350	44				

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

* Suspect Data

241-BX-107 DRYWELL ACTIVITY						
WELL #21-07-06 WELL DEPTH 100'						
GM # 1 PROBE 2nd Peak						
Date	Peak C/S	Depth ft.		Date	Peak C/S	Depth ft.
1/16/90				1/14/93	2600	66
2/13/90				2/9/93	2400	67
3/13/90				3/10/93	2500	67
4/11/90				4/7/93	2400	67
5/7/90				5/4/93	2524	67
6/6/90				5/17/93	2300	67
*7/2/90				5/24/93	2600	67
7/3/90				6/2/93	2300	67
7/31/90				6/9/93	2400	66
*8/30/90				6/28/93	2200	67
8/30/90				7/7/93	2000	67
9/28/90				*7/14/93		
10/23/90				7/15/93	2000	67
11/19/90				7/21/93	2200	67
12/18/90				7/28/93	2200	67
*1/17/91				8/10/93	2200	66
1/17/91				8/18/93	2200	67
1/21/91				8/24/93	2200	67
*2/15/91				9/2/93	2200	67
2/16/91				9/9/93	2100	65
3/13/91				9/15/93	2200	67
4/10/91				9/23/93	2300	67
*5/6/91				9/29/93	2200	67
5/6/91				10/5/93	2200	67
*6/3/91				10/14/93		
6/3/91				10/20/93	2200	67
7/2/91				10/26/93	2200	67
7/31/91				11/9/93	2200	67
8/30/91				*11/11/93		
9/25/91				11/12/93	2400	67
10/23/91						
11/20/91						
1/15/92						
2/15/92						
3/10/92						
4/9/92						
5/7/92						
6/4/92						
6/29/92						
7/29/92	2500	67				
8/25/92	2600	67				
9/22/92	2400	66				
10/23/92	2500	67				
11/19/92	2550	67				
12/15/92	2400	67				

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

*Suspect Data

241-BX-107 DRYWELL ACTIVITY						
WELL #21-07-06 WELL DEPTH 100'						
GM # 1 PROBE 3rd Peak						
Date	Peak C/S	Depth ft.		Date	Peak C/S	Depth ft.
1/16/90				1/14/93	550	90
2/13/90				2/9/93	500	90
3/13/90				3/10/93	550	90
4/11/90				4/7/93	530	90
5/7/90				5/4/93	550	91
6/6/90				5/17/93	510	90
*7/2/90				5/24/93	510	90
7/3/90				6/2/93	460	90
7/31/90				6/9/93	480	90
*8/30/90				6/28/93	480	90
8/30/90				7/7/93	440	90
9/28/90				*7/14/93		
10/23/90				7/15/93	460	90
11/19/90				7/21/93	480	90
12/18/90				7/28/93	480	91
*1/17/91				8/10/93	460	90
1/17/91				8/18/93	460	91
1/21/91				8/24/93	480	91
*2/15/91				9/2/93	490	90
2/16/91				9/9/93	480	90
3/13/91				9/15/93	470	90
4/10/91				9/23/93	470	91
*5/6/91				9/29/93	460	91
5/6/91				10/5/93	460	91
*6/3/91				10/14/93		
6/3/91				10/20/93	460	90
7/2/91				10/26/93	500	90
7/31/91				11/9/93	470	90
8/30/91				*11/11/93		
9/25/91				11/12/93	500	90
10/23/91						
11/20/91						
1/15/92						
2/15/92						
3/10/92						
4/9/92						
5/7/92						
6/4/92						
6/29/92						
7/29/92	500	90				
8/25/92	550	90				
9/22/92	500	90				
10/23/92	550	90				
11/19/92	550	90				
12/15/92	600	90				

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

*Suspect Data

241-BX-107 DRYWELL ACTIVITY						
WELL #21-07-06 WELL DEPTH 100'						
GM # 2 PROBE 1st Peak						
Date	Peak C/S	Depth ft.		Date	Peak C/S	Depth ft.
1/16/90	290	44		3/10/93	294	44
2/13/90	294	44		4/7/93	306	44
3/13/90	291	44		5/4/93	300	44
4/11/90	259	44		5/17/93	292	44
5/7/90	287	44		5/24/93	234	44
6/6/90	332	44		6/3/93	284	44
7/2/90	285	44		6/9/93	269	44
7/31/90	280	44		6/28/93	275	44
*8/30/90	320	44		7/7/93	277	44
8/30/90	279	44		7/14/93	250	44
9/28/90	300	44		7/21/93	215	44
10/24/90	324	44		7/28/93	287	44
11/19/90	312	44		8/10/93	308	44
12/18/90	331	44		8/18/93	291	44
1/17/91	375	44		8/24/93	285	44
1/21/91	339	44		9/1/93	285	44
*2/15/91	396	44		9/9/93	236	44
2/15/91	362	44		9/15/93	275	44
3/13/91	379	44		9/23/93	280	44
4/10/91	363	44		9/29/93	314	44
*5/6/91	309	44		10/5/93	279	44
5/6/91	291	44		10/14/93	288	44
6/3/91	288	44		10/20/93	297	44
7/3/91	291	44		10/27/93	287	44
7/31/91	320	44		*11/9/93	141	44
8/30/91	321	44		11/10/93	245	45
9/25/91	303	44				
10/23/91	276	44				
11/20/91	300	44				
12/17/91	312	44				
1/15/92	317	44				
2/15/92	283	45				
3/10/92	310	44				
4/9/92	313	44				
5/7/92	312	44				
6/4/92	261	44				
6/29/92	300	44				
7/29/92	334	44				
8/25/92	277	44				
9/22/92	291	44				
10/21/92	287	44				
11/19/92	286	44				
12/15/92	280	44				
1/14/93	316	44				
2/9/93	281	44				

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

*Suspect Data

241-BX-107 DRYWELL ACTIVITY						
WELL #21-07-06 WELL DEPTH 100'						
GM # 2 PROBE 2nd Peak						
Date	Peak C/S	Depth ft.		Date	Peak C/S	Depth ft.
1/16/90				3/10/93		
2/13/90				4/7/93		
3/13/90				5/4/93		
4/11/90				5/17/93		
5/7/90				5/24/93		
6/6/90				6/3/93	200	47
7/2/90				6/9/93		
7/31/90				6/28/93	135	47
*8/30/90				7/7/93	180	47
8/30/90				7/14/93	180	42
9/28/90				7/21/93		
10/24/90				7/28/93	210	41
11/19/90				8/10/93	210	40
12/18/90				8/18/93	180	40
1/17/91				8/24/93	200	40
1/21/91				9/1/93	200	41
*2/15/91				9/9/93	220	41
2/15/91				9/15/93	170	41
3/13/91				9/23/93	220	41
4/10/91				9/29/93	180	41
*5/6/91				10/5/93	220	41
5/6/91				10/14/93		
6/3/91				10/20/93	200	41
7/3/91				10/27/93	220	41
7/31/91				*11/9/93		
8/30/91				11/10/93	220	41
9/25/91						
10/23/91						
11/20/91						
12/17/91						
1/15/92						
2/15/92						
3/10/92						
4/9/92						
5/7/92						
6/4/92						
6/29/92						
7/29/92						
8/25/92						
9/22/92						
10/21/92						
11/19/92						
12/15/92						
1/14/93						
2/9/93						

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

*Suspect Data

241-BX-107 DRYWELL ACTIVITY						
WELL #21-07-06 WELL DEPTH 100'						
GM # 2 PROBE 3rd Peak						
Date	Peak C/S	Depth ft.		Date	Peak C/S	Depth ft.
1/16/90				3/10/93		
2/13/90				4/7/93		
3/13/90				5/4/93		
4/11/90				5/17/93		
5/7/90				5/24/93		
6/6/90				6/3/93		
7/2/90				6/9/93		
7/31/90				6/28/93		
*8/30/90				7/7/93		
8/30/90				7/14/93	70	27
9/28/90				7/21/93		
10/24/90				7/28/93		
11/19/90				8/10/93	80	27
12/18/90				8/18/93	75	26
1/17/91				8/24/93	57	26
1/21/91				9/1/93	62	26
*2/15/91				9/9/93		
2/15/91				9/15/93	75	28
3/13/91				9/23/93	60	27
4/10/91				9/29/93	68	27
*5/6/91				10/5/93	75	27
5/6/91				10/14/93		
6/3/91				10/20/93	87	27
7/3/91				10/27/93	80	27
7/31/91				*11/9/93		
8/30/91				11/10/93	68	27
9/25/91						
10/23/91						
11/20/91						
12/17/91						
1/15/92						
2/15/92						
3/10/92						
4/9/92						
5/7/92						
6/4/92						
6/29/92						
7/29/92						
8/25/92						
9/22/92						
10/21/92						
11/19/92						
12/15/92						
1/14/93						
2/9/93						

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

[illegible]

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

[illegible]

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

[illegible]

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

- **Suspect Data**

[illegible]

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

[illegible]

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

[illegible]

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

[illegible]

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

[illegible]

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

• Suspect Data

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[illegible]

Data obtained from WHC Surveillance Data Acquisition (SDA), November 30, 1993.

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- **Suspect Data**

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241-BX-101		
NO.	DIA.	DESCRIPTION AND COMMENTS
1	4 "	BM, BREATHER FILTER
2	12 "	TEMPERATURE WC
3	12 "	(SLUICING NOZZLE) WC
4	4 "	(RECIRCULATING DIP TUBE) WC
5	4 "	(RECIRCULATING DIP TUBE) WC
6	12 "	(SLUICING NOZZLE) WC
7	12 "	OBSV PORT
8	4 "	LIQUID LEVEL REEL
13	36 "	(HEEL JET) WC
14	42 "	(PUMP) WC

241-BX-101

2,008,700 Liters
[530,000 Gallons]

TANK RISER LOCATION

Ref: H-2-602, Rev. 8
Merrick Maps of
200 Area's 89210406

241-BX-102		
NO.	DIA.	DESCRIPTION AND COMMENTS
1	4"	TEMPERATURE PROBE, BM
2	12"	BREATHER FILTER, OBSV PORT
3	12"	(SLUICING NOZZLE) WC
4	4"	(RECIRCULATING DIP TUBE) WC
5	4"	(RECIRCULATING DIP TUBE) WC
6	12"	(SLUICING NOZZLE) WC
7	12"	LIQUID LEVEL
8	4"	TEMPERATURE PROBE, BM
13	18"	(HEEL JET)
14	42"	(PUMP)

241-BX-102

2,008,700 Liters
[530,000 Gallons]

TANK RISER LOCATION

Approximate Grade Elevation 199.8m [655.5ft]

Ref: H-2-602, Rev. 8
Merrick Maps of
200 Area's 89210406

241-BX-103		
NO.	DIA.	DESCRIPTION AND COMMENTS
1	4"	TEMPERATURE PROBE
2	12"	FLANGE/BREATHER FILTER, G1 HOUSING
3	12"	(SLUICING NOZZLE) WC
4	4"	(RECIRCULATING DIP TUBE) WC
5	4"	(RECIRCULATING DIP TUBE) WC
6	12"	(SLUICING NOZZLE) WC
7	12"	FLANGE/B-222 OBSV PORT
8	4"	FIC, BM
13	42"	(HEEL JET)
14	42"	MANHOLE WC

241-BX-103

2,008,700 Liters
[530,000 Gallons]

TC=Thermocouple
Ref: WHC-SD-RE-TI-053, Rev. 8
WHC-SD-WM-TI-553, Rev. 0
H-2-73314, Rev. 2

TANK RISER LOCATION

Approximate Grade Elevation 199.3m [653.9ft]

Ref: H-2-602, Rev. 8
Merrick Maps of
200 Area's 89210406

241-BX-104		
NO.	DIA.	DESCRIPTION AND COMMENTS
1	4 "	BREATHER FILTER, G1 HOUSING, BM
2	12 "	IN PIT WALL WC
3	12 "	(SLUICING NOZZLE) WC
4	4 "	(RECIRCULATING DIP TUBE) WC
5	4 "	(RECIRCULATING DIP TUBE) WC
6	12 "	(SLUICING NOZZLE) WC
7	12 "	OBSV PORT
8	4 "	FIC, BM
9	42 "	SLUDGE PUMP, WC
13	12 "	SALTWELL SCREEN AND PUMP

241-BX-104

2,008,700 Liters
[530,000 Gallons]

TANK RISER LOCATION

Approximate Grade Elevation 200.2m [656.8ft]

Ref: H-2-602, Rev. 8
Merrick Maps of
200 Area's 89210406

241-BX-105		
NO.	DIA.	DESCRIPTION AND COMMENTS
1	4"	FIC, BM
2	12"	OBSV PORT
3	12"	(PUMP) WC
4	4"	(PROCESS INLET) WC
5	4"	BLIND FLANGE, WC
6	12"	EXHAUSTER PORT
7	12"	TEMPERATURE PROBE, MANUAL
8	4"	BREATHER FILTER, G1 HOUSING, BM
13	12"	(SALTWELL PUMP) WC
14	42"	(MH) WC

241-BX-105

2,008,700 Liters
[530,000 Gallons]

TANK RISER LOCATION

Ref: H-2-602, Rev. 8
Merrick Maps of
200 Area's 89210406

241-BX-106		
NO.	DIA.	DESCRIPTION AND COMMENTS
1	4"	BREATHER FILTER, G1 HOUSING
2	12"	B-222 OBSV PORT
3	12"	(HEEL JET PUMP) WC
4	4"	(PROCESS INLET) WC
5	4"	BLIND FLANGE WC
6	12"	EXHAUSTER PORT, BLIND FLANGE
7	12"	TEMPERATURE PROBE
8	4"	FIC, BM
13	12"	HEEL JET WC
14	42"	(MH) WC

241-BX-106

2,008,700 Liters
[530,000 Gallons]

TANK RISER LOCATION

Approximate Grade Elevation 199.3m [653.9ft]

Ref: H-2-602, Rev. 8
 Merrick Maps of
 200 Area's 89210406

241-BX-107		
NO.	DIA.	DESCRIPTION AND COMMENTS
1	4 "	BLIND FLANGE, BM
2	12 "	BREATHER FILTER, G1 HOUSING
3	12 "	BLIND FLANGE
4	4 "	TEMPERATURE PROBE
5	4 "	BLIND FLANGE
6	12 "	FLANGE/B-222 OBSV PORT
7	12 "	BLIND FLANGE
8	4 "	FIC, BM
9	42 "	MH, BG
10	42 "	MH, BG
11	4 "	BLIND FLANGE, IN CAISSON
13	12 "	(SALTWELL SCREEN AND PUMP) BM

241-BX-107

2,008,700 Liters
[530,000 Gallons]

TANK RISER LOCATION

Approximate Grade Elevation 200.2m [656.8ft]

Ref: H-2-602, Rev. 8
Merrick Maps of
200 Area's 89210406

241-BX-108		
NO.	DIA.	DESCRIPTION AND COMMENTS
1	4"	BREATHER FILTER
2	12"	FLANGE, BM
3	12"	PUMP WC
4	4"	PIT RISER WC
5	4"	TEMPERATURE PROBE
6	12"	FLANGE/B-222 OBSV PORT
7	12"	LIQUID LEVEL REEL/REMAIN IN OPERATION
8	4"	BM, TEMPERATURE, FLANGE
10	42"	MH, BG
11	42"	MH, BG
13	12"	FLANGE, BM

241-BX-108

2,008,700 Liters
[530,000 Gallons]

TANK RISER LOCATION

Approximate Grade Elevation 199.8m [655.5ft]

Ref: H-2-602, Rev. 8
Merrick Maps of
200 Area's 89210406

241-BX-109		
NO.	DIA.	DESCRIPTION AND COMMENTS
1	4 "	FLANGE, BM
2	12 "	FLANGE
3	12 "	TEMPERATURE PROBE
4	4 "	BREATHER FILTER, G1 HOUSING
5	4 "	TEMPERATURE PROBE
6	12 "	FLANGE
7	12 "	FLANGE/B-222 OBSV PORT
8	4 "	FIC, BM
9	42 "	MH, BG
13A	12 "	SALTWELL SCREEN AND PUMP

241-BX-109

2,008,700 Liters
[530,000 Gallons]

TANK RISER LOCATION

Ref: H-2-602, Rev. 8
Merrick Maps of
200 Area's 89210406

241-BX-110		
NO.	DIA.	DESCRIPTION AND COMMENTS
1	4"	TEMPERATURE PROBE, BM
2	12"	LIQUID LEVEL REEL
3	12"	FLANGE/B-222 OBSV PORT
4	4"	BREATHER FILTER
5	4"	SMP, BM
6	12"	FLANGE
7	12"	PUMP, SLATWELL SCREEN WC
8	4"	DRAIN WC
13	12"	SALTWELL SCREEN
14	42"	MH, BG
15	42"	MH, BG

241-BX-110

2,008,700 Liters
[530,000 Gallons]

TANK RISER LOCATION

Approximate Grade Elevation 200.2m [656.8ft]
(ICF Kaiser Hanford Field Survey, 3/29/94)

Ref: H-2-602, Rev. 8

241-BX-111		
NO.	DIA.	DESCRIPTION AND COMMENTS
1	4 "	TEMPERATURE PROBE, BM
2	12 "	LIQUID LEVEL REEL
3	12 "	FLANGE/B-222 OBSV PORT
4	4 "	BREATHER FILTER, G1 HOUSING
5	4 "	B-436 LOW, BM
6	12 "	FLANGE
7	12 "	PUMP WC
8	4 "	DRAIN WC
13	12 "	(SALTWELL SCREEN)
14	42 "	MH, BG
15	42 "	MH, BG

241-BX-111

2,008,700 Liters
[530,000 Gallons]

TANK RISER LOCATION

Approximate Grade Elevation 199.8m [655.5ft]
(ICF Kaiser Hanford Field Survey, 3/29/94)

Ref: H-2-602, Rev. 8

241-BX-112		
NO.	DIA.	DESCRIPTION AND COMMENTS
1	4 "	TEMPERATURE PROBE, BM
2	12 "	FLANGE
3	12 "	FLANGE
4	4 "	BREATHER FILTER, G1 HOUSING
5	4 "	PIT DRAIN WC
6	12 "	WC
7	12 "	FLANGE/INSTALL B-222 OBSV PORT
8	4 "	FIC, BM
13	12 "	SALWELL SCREEN AND PUMP

241-BX-112

2,008,700 Liters
[530,000 Gallons]

TANK RISER LOCATION

Ref: H-2-602, Rev. 8
Merrick Maps of
200 Area's 89210406

Waste Tank 101-BX		
ANALYSIS OF SLUDGE SAMPLE FROM TANK 101-BX		
March 8, 1976		
Received: January 26, 1976		
COMPONENT	LAB VALUE	LAB UNITS
Physical Data		
Visible: Solids, dark brown in color		
Bulk Density	1.68	g/cc
Particle Density	1.98	g/cc
H2O	29.1	%
Chemical Analysis		
Al	10.0	moles/L
Fe	0.4	moles/L
NO3	4.0	moles/L
Mg	0.08	moles/L
Mn	0.2	moles/L
Ca	0.1	moles/L
Ba	0.01	moles/L
Si	1.6	moles/L
PO4	0.1	moles/L
Radiological Analysis		
Pu	1.45E-03	g/L
89,90 Sr	1.8	Ci/L
89,90 Sr	1.20E-02	watts/L
137 Cs	1.2	Ci/L
137 Cs	5.95E-03	watts/L

Waste Tank 102-BX		
TANK 102-BX LIQUID SAMPLE ANALYSES		
March 26, 1971		
<u>Sample T-83, January 27, 1970</u>		
COMPONENTS	LAB VALUE	LAB UNIT
Physical Data		
pH	12.6	
SpG	1.03	
NVR	242	g/l
Chemical Analysis		
OH-	1.16	M
Na +	3.07	M
Radiological Analysis		
137 Cs	2.76E + 05	uCi/gal
134 Cs	6.45E + 03	uCi/gal
90Sr	164	uCi/cal
106 RuRh	0.0462	Ci/gal
<u>Sample # 527, March 1, 1970</u>		
Radiological Analysis		
137 Cs	1.17E + 05	uCi/gal
125 Sb	2.07E + 03	uCi/gal
60 Co	2.77E + 02	uCi/gal
106 RuRh	4.35E + 04	uCi/gal
95 ZrNb	2.80E + 03	uCi/gal
<u>Sample #3270, April 30, 1970</u>		
Radiological Analysis		
137 Cs	7.26E + 05	uCi/gal
134 Cs	2.33E + 04	uCi/gal

Waste Tank 102-BX		
ANALYSIS OF TANK FARM SAMPLES		
December 13, 1974		
SAMPLE: T-8511 Received: September 30, 1974		
COMPONENTS	LAB VALUE	LAB UNIT
Physical Data		
Vis-OTR: Clear yellow. < 1% solids. 1.5 Rad/hr		
pH	14	
SpG	1.4669	
Water	49.3	%
Chemical Analysis		
OH	2.48	M
Al	2.0	M
Na	11.39	M
NO2	2.17	M
NO3	2.92	M
SO4	Cancelled by R.L. Walser	
PO4	2.65E-02	M
F	9.18E-03	M
CO3	0.274	M
Radiological Analysis		
Pu	<6.21E-06	g/gal
GEA 134Cs	1.17E+04	uCi/gal
GEA 137 Cs	1.38E+06	uCi/gal
89,90 Sr	1.50E+03	uCi/gal

Waste Tank BX-103		
Analysis of Tank Farm Samples		
November 25, 1974		
Sample: T-8630		
COMPONENT	LAB VALUE	LAB UNIT
Physical Data		
Vis-OTR: Yellow, No solids, .15 Rad/hr		
PH:	12.9	
SpG:	1.063	
H2O	93.28	%
Chemical Analysis		
OH	0.353	M
Al	2.61 x 10E-2	M
Na	1.44	M
NO2	0.292	M
NO3	0.274	M
SO4	Cancelled by R.L. Walser	
PO4	4.01E-02	M
CO3	0.204	M
F	1.11 E-02	M
Radiological Analysis		
Pu	2.53 E-05	g/gal
89+90 Sr	1.57 E+02	uCi/gal
GEA: 106 RuRh	9.61 E+04	uCi/gal
GEA: 137 Cs	1.12 E+05	uCi/gal

Waste Tank BX-103		
Analysis Of Tank Farm Samples		
March 27, 1975		
Received: March 17, 1975 Sample: T-2764		
COMPONENTS	LAB VALUE	LAB UNIT
Physical Data		
Vis-OTR: Brown ,1 % solids 900 m/Rad/Hr		
pH	12.7	
H2O	81.93	%
SpG	1.0373	
Chemical Analysis		
OH	0.359	M
Radiological Analysis		
GEA: Cs 134	7.70 E+03	uCi/gal
GEA: Cs 137	6.52 E+05	uCi/gal
GEA: Cs 125	9.24 E+03	uCi/gal

Waste Tank 103-BX		
ANALYSIS OF TANK FARM SAMPLES		
October 27, 1975		
Received: April 14, 1975		
Sample: T-3635		
COMPONENT	LAB VALUE	LAB UNITS
Physical Data		
Vis-OTR:	Light Brown-amber, No solids, 800 mrad/hr	
pH	12.0	
SpG	1.1383	
H2O	92.69	%
Chemical Analysis		
OH	0.264	M
Al	2.38E-02	M
Na	2.02	M
NO2	0.582	M
NO3	0.504	M
PO4	1.14E-02	M
F	7.02E-03	M
CO3	0.407	M
Pu	4.62E-04	g/gal
Radiological Analysis		
134 Cs	8.61E+02	uCi/gal
139 Cs	2.19E+05	uCi/gal
106 RuRh	1.62E+05	uCi/gal
154 Eu	1.01E+03	uCi/gal

Waste Tank 103-BX		
ANALYSIS OF TANK FARM SAMPLES		
September 23, 1975		
Received: June 18, 1975		
Sample: T-5455		
COMPONENT	LAB VALUE	LAB UNITS
Physical Data		
Vis-OTR:	Brown, No solids, 600 mrad/hr	
pH	11.8	
SpG	1.124	
H2O	99.14	%
Chemical Analysis		
OH	0.788	<u>M</u>
Al	6.05E-03	<u>M</u>
NO2	0.908	<u>M</u>
NO3	0.433	<u>M</u>
CO3	0.620	<u>M</u>
Radiological Analysis		
89,90 Sr	6.01E+04	uCi/gal
GEA: 134 Cs	9.24E+02	uCi/gal
GEA: 137 Cs	1.79E+05	uCi/gal
GEA: 106 RuRh	2.21E+05	uCi/gal

Waste Tank 103-BX		
ANALYSIS OF TANK FARM SAMPLES		
December 18, 1975		
Received: October 23, 1975		
Sample: T-9138		
COMPONENT	LAB VALUE	LAB UNITS
Physical Data		
Vis-OTR:	Yellow, No solids, 300 mrad/hr	
pH	10.6	
SpG	1.103	
H2O	86.18	%
Chemical Analysis		
OH	<4.74E-03	<u>M</u>
Al	2.51E-03	<u>M</u>
Na	1.98	<u>M</u>
NO2	0.433	<u>M</u>
NO3	0.339	<u>M</u>
PO4	1.09E-02	<u>M</u>
Cl	1.10E-02	<u>M</u>
F	3.84E-03	<u>M</u>
CO3	0.555	<u>M</u>
Pu	4.92E-04	g/gal
Radiological Analysis		
89,90 Sr	1.68E+04	uCi/gal
GEA: 134 Cs	8.46E+02	uCi/gal
GEA: 137 Cs	1.09E+05	uCi/gal
GEA: 106 RuRh	1.58E+05	uCi/gal

Waste Tank BX- 104		
242 -S Feed Samples T-2045		
February 28, 1974		
COMPONENT	LAB VALUE	LAB UNIT
Physical Data		
Vis - OTR:yellow, No solids 200 mr/hr		
pH	11.01	
spG	1.1325	
H2O	89.03	%
Chemical Analysis		
Na	1.64	<u>M</u>
SO4	0.175	<u>M</u>
Al	2.57 E-03	<u>M</u>
NO2	0.754	<u>M</u>
F	5.82 E-03	<u>M</u>
CO3	0.334	<u>M</u>
NO3	0.206	<u>M</u>
PO4	1.47E-02	<u>M</u>
OH	0.384	<u>M</u>
Radiological Analysis		
Pu	1.33E-04	g/l
GEA 134 Cs	83.64	uCi/l
GEA 137	1.63 E+04	uCi/l
GEA106 RuRh	4.82 E+04	uCi/l

Waste Tank BX - 104		
Analysis of Tank Farm Samples		
January 10, 1975		
Sample: T-9245 Received: October 29, 1974		
COMPONENT	LAB VALUE	LAB UNIT
Physical Data		
Vis -OTR Yellow, No solids, 1.7 Rad/hr		
pH	> 12.7	
spG	1.121	
H2O	86.53	%
Chemical Analysis		
OH	4.78 E-02	<u>M</u>
Al	1.0E-02	<u>M</u>
Na	13.5	<u>M</u>
NO2	0.843	<u>M</u>
NO3	0.243	<u>M</u>
Pu	2.68E-04	gm/gal
PO4	1.46 E-02	<u>M</u>
F	5.20E-03	<u>M</u>
CO3	0.588	<u>M</u>
Radiological Analysis		
134 Cs	1.70 E+03	uCi/gal
137 Cs	1.99 E+05	uCi/gal
106 Ru Rh	1.61 E+05	uCi/gal
89 + 90 Sr	72.75	uCi/gal

Waste Tank BX-104		
Analysis of Tank Farm Samples		
May 20, 1975		
Sample: T-365 Received: December 6, 1974		
COMPONENT	LAB VALUE	LAB UNIT
Physical Data		
Vis - OTR: Yellow, no solids, 1 rad/hr		
pH	12.8	
SpG	1.1286	
H2O	85.95	%
Chemical Analysis		
OH	0.718	<u>M</u>
Al	1.10 E-02	<u>M</u>
Na	2.80	<u>M</u>
NO2	0.757	<u>M</u>
NO3	0.219	<u>M</u>
SO4	Sample Slurped	
PO4	3.07 E-02	<u>M</u>
F	4.95 E-03	<u>M</u>
Co	0.564	<u>M</u>
Pu	2.66E-04	g/gal
Radiological Analysis		
GEA: 134 Cs	1.70 E+03	uCi/gal
GEA: 137 Cs	1.98 E+05	uCi/gal
GEA: 106 RuRh	1.43 E+05	uCi/gal

Waste Tank BX-104		
October 21, 1975		
Analysis of Tank Farm Samples		
Sample: T-6110 Received: July 15, 1975		
COMPONENT	LAB VALUE	LAB UNITS
Physical Data		
Vis-ORT: Dark yellow : No Solids; 400 mrad/hr		
pH	12.2	
SpG	1.1471	
H2O	84.20	%
Chemical Analysis		
OH	0.217	M
Al	7.27E-03	M
Na	2.81	M
NO2	1.02	M
NO3	0.592	M
PO4	1.55E-02	M
Cl	9.12E-03	M
F	3.18E-03	M
CO3	0.598	M
Radiological Analysis		
Pu	5.05E-04	g/gal
GEA: 106 RuRh	1.58E+05	uCi/gal
GEA 125 Sb	1.06E+03	uCi/gal
GEA 134 Cs	1.26E+03	uCi/gal
GEA 137 Cs	1.42E+05	uCi/gal
89/90 Sr	7.44E+03	uCi/gal

Waste Tank BX-104		
Analysis of Tank Farm Samples		
October 21, 1975		
Sample: T-7088 August 15, 1975		
COMPONENT	LAB VALUE	LAB UNITS
Physical Data		
Vis-ORT: Clear yellow : No Solids; 250 mrad/hr		
pH	10.3	
SpG	1.1285	
H2O	83.22%	
Chemical Analysis		
OH	<5E-03	M
Al	1.82	M
Na	2.99	M
NO2	0.765	M
NO3	0.504	M
PO4	8.81E-03	M
Cl	1.13E-02	M
F	5.78E-03	M
CO3	0.577	M
Radiological Analysis		
Pu	6.43E-04	g/gal
GEA: 106 RuRh	1.84E+05	uCi/gal
GEA 134 Cs	1.12E+03	uCi/gal
GEA 137 Cs	1.23E+05	uCi/gal
89/90 Sr	1.55E+04	uCi/gal

Waste Tank BX-104		
February 12, 1976		
Analysis of Tank Farm Samples		
Sample: T-9511 November 5, 1975		
COMPONENTS	LAB VALUE	LAB UNITS
Physical Data		
Vis-ORT: Yellow; No solids; 180 mrad/hr		
pH	11.8	
SpG	1.087	
H2O	87.97	%
Chemical Analysis		
OH	<9.5E-03	M
Al	8.15E-04	M
Na	1.88	M
NO2	0.708	M
NO3	0.242	M
PO4	9.28E-03	M
Cl	1.33E-02	M
F	6.00E-03	M
CO3	0.548	M
Radiological Analysis		
Pu	4.16E-04	gm/gal
GEA: 134 Cs	4.48E+02	uCi/gal
GEA 137 Cs	9.20E+04	uCi/gal
GEA 106 RuRh	1.44E+05	uCi/gal
89/90 Sr	8.38E+03	uCi/gal

Waste Tank BX-104		
Data Transmittal Package for 241-BX-104		
January 21, 1988		
Date Received: January 5, 1988		
COMPONENT	MAXIMUM TOTAL	LAB UNIT
Physical Data		
Visible: Brown		
Bulk Density	1.85E+00	ug/g
Mass (Total)	6.19 E+01	
Chemical Analysis		
Aluminum	4.08E+04	ug/g
Barium	1.21E+03	ug/g
Bismuth	1.71E+03	ug/g
Boron	9.36E+04	ug/g
Cadmium	2.43E+01	ug/g
Calcium	3.88E+03	ug/g
Chromium	3.09E+03	ug/g
Cobalt	1.51E+01	ug/g
Copper	1.19E+02	ug/g
Iron	9.62E+03	ug/g
Lead	5.50E+02	ug/g
Magnesium	1.90E+03	ug/g
Manganese	8.31E+02	ug/g
Nickel	1.95E+02	ug/g
Phosphorus	4.50E+03	ug/g
Potassium	9.55E+02	ug/g
Silicon	2.59E+04	ug/g
Silver	1.08E+02	ug/g
Sodium	6.98E+04	ug/g
Strontium	7.71E+01	ug/g
Zinc	1.21E+02	ug/g
Zirconium	1.14E+03	ug/g
TOC	1.78E+03	ug/g
Uranium	4.19E+04	ug/g
Radiological Analysis		
Pu-239,40	3.41E-01	uCi/g
C-14	6.28E-04	uCi/g
Sr 90	3.75E+02	uCi/g
Tc-99	3.35E-02	uCi/g
Am 241	2.27E-01	uCi/g
Co-60	7.70E-02	uCi/g
Cs-137	7.51E+01	uCi/g
I-129	5.20E-05	uCi/g
Total Gamma	8.62E+01	uCi/g
Radiation	2.50E+02	mR/h

Waste Tank BX-104		
Data Transmittal Package for 241-BX-104 Waste Characterization		
January 21, 1988		
Date Received: January 5, 1988		
COMPONENTS	MAXIMUM TOTAL	REPORT UNIT
Physical Data		
Visible: Brown with small hard chunks		
Mass (total)	5.49E+01	g
Bulk Density	1.76E+00	g/mL
Chemical Analysis		
Aluminum	5.40E+04	ug/g
Barium	2.09E+03	ug/g
Bismuth	1.10E+03	ug/g
Boron	5.65E+00	ug/g
Cadmium	2.50E+01	ug/g
Calcium	5.80E+03	ug/g
Chromium	4.48E+03	ug/g
Cobalt	8.41E+00	ug/g
Copper	7.17E+01	ug/g
Iron	5.06E+03	ug/g
Lead	5.94E+02	ug/g
Magnesium	3.04E+03	ug/g
Manganese	1.13E+03	ug/g
Nickel	1.15E+02	ug/g
Phosphorus	3.01E+03	ug/g
Potassium	1.16E+03	ug/g
Silicon	3.89E+04	ug/g
Silver	7.08E+01	ug/g
Sodium	6.75E+04	ug/g
Strontium	4.66E+01	ug/g
Zinc	1.02E+02	ug/g
Zirconium	1.37E+03	ug/g
Nitrate	3.50E+04	ug/g
TOC	2.71E+03	ug/g
Uranium	1.40E+04	ug/g
Radiological Analysis		
Pu-237,240	3.91E-01	uCi/g
C-14	3.53E-04	uCi/g
Sr-90	1.54E+02	uCi/g
Tc-99	3.23E-02	uCi/g
Am-241	1.03E+00	uCi/g
Co-60	6.00E-02	uCi/g
Cs-137	1.24E+02	uCi/g
I-129	3.50E-05	uCi/g
Total Gamma	1.47E+02	uCi/g
Radiation	2.50E+02	mR/h

Waste Tank 105-BX		
242 -S Feed Samples T-2046		
February 28, 1974		
COMPONENT	LAB VALUE	LAB UNIT
Physical Data		
Vis-OTR; Yellow, no solids 500 mr/hr.		
pH	10.8	
SpG	1.0956	
H2O	86.02	%
Chemical Analysis		
Na	2.21	M
SO4	0.136	M
Al	6.91E-03	M
NO2	0.477	M
F	1.04 E-02	M
NO3	0.23	M
PO4	1.22 E-02	M
CO3	0.394	M
OH	0.504	M
Radiological Analysis		
GEA: 134 Cs	5.16 E+02	uCi/l
GEA: 137 Cs	6.75 E+04	uCi/l
GEA 106 Ru Rh	9.22 E+04	uCi/l

Waste Tank 105 BX		
Analysis of Tank Farm Samples		
Sample: T - 1437		
October 27, 1975		
Received: January 14, 1975		
COMPONENT	LAB VALUE	LAB UNIT
Physical Data		
Vis-OTR: Clear Yellow, no solids, 1000mrad/hr		
pH	11.1	
SpG	1.2034	
H2O	79.70%	
Chemical Analysis		
OH	< 1.89 E-02	<u>M</u>
Al	5.53 E-04	<u>M</u>
Na	3.42	<u>M</u>
NO2	1.29	<u>M</u>
NO3	1.20	<u>M</u>
Pu	2.07E-04	<u>g/gal</u>
PO4	5.19 E-02	<u>M</u>
F	2.46 E-02	<u>M</u>
CO3	0.462	<u>M</u>
Radiological Analysis		
GEA 137 Cs	1.50 E+05	uCi/gal
89 + 90 Sr	3.50 E+02	uCi/gal

Waste Tank 105-BX		
ANALYSIS OF TANK FARM SAMPLES		
November 26, 1975		
Data Received: October 16, 1975		
Sample: T-8924		
COMPONENT	LAB VALUE	LAB UNITS
Physical Data		
Vis-OTR:	Yellow, No solids, 1 Rad on contact.	
pH	12.4	
SpG	1.176	
H2O	76.88	%
Chemical Analysis		
OH	0.982	<u>M</u>
Al	0.135	<u>M</u>
Na	3.95	<u>M</u>
NO2	1.77	<u>M</u>
NO3	1.47	<u>M</u>
SO4	Cancelled	<u>M</u>
PO4	5.84E-02	<u>M</u>
Cl	3.87E-02	<u>M</u>
F	1.62E-04	<u>M</u>
CO3	0.447	<u>M</u>
Radiological Analysis		
Pu	8.33E-05	g/gal
89,90 Sr	13.47	uCi/gal
GEA: 134 Cs	1.22E + 02	uCi/gal
GEA: 137 Cs	6.54E + 05	uCi/gal

Waste Tank 105-BX		
ANALYSIS OF TANK FARM SAMPLES		
March 16, 1976		
Data Received: February 11, 1976		
Sample: T-2325		
COMPONENT	LAB VALUE	LAB UNITS
Physical Data		
Vis-OTR:	Dark Yellow, No solids, 800 mRads/hr	
pH	12.6	
SpG	1.369	
H2O	56.38	%
Chemical Analysis		
OH	2.11	<u>M</u>
NO3	2.51	<u>M</u>
NO2	1.24	<u>M</u>
CO3	0.251	<u>M</u>
PO4	1.60E-02	<u>M</u>
SO4	5.50E-02	<u>M</u>
Cl	9.60E-02	<u>M</u>
F	4.40E-03	<u>M</u>
Al	1.17	<u>M</u>
Na	2.83	<u>M</u>
Cu	4.60E-05	<u>M</u>
Pb	3.19E-04	<u>M</u>
Hg	1.16E-03	<u>M</u>
Radiological Analysis		
Pu	1.74E-05	g/gal
89,90 Sr	3.44E + 02	uCi/gal

Waste Tank 105-BX		
Data Transmittal Package for 241-BX-105 Waste Tank Characterization		
January 21, 1988		
Data Received: January 5, 1988		
COMPONENT	MAXIMUM TOTAL	LAB UNIT
Physical Data		
Mass (total)	1.05E+02	g
Bulk Density	1.58E+00	g/ml
Chemical Analysis		
Aluminum	1.68E+04	ug/g
Barium	2.44E+03	ug/g
Bismuth	1.29E+03	ug/g
Boron	6.09E+00	ug/g
Cadmium	6.35E+01	ug/g
Calcium	5.16E+03	ug/g
Chromium	1.47E+04	ug/g
Cobalt	1.14E+00	ug/g
Copper	3.25E+01	ug/g
Iron	9.80E+03	ug/g
Lead	8.31E+02	ug/g
Magnesium	2.62E+03	ug/g
Manganese	2.56E+03	ug/g
Nickel	2.21E+02	ug/g
Phosphorus	3.20E+04	ug/g
Potassium	1.43E+03	ug/g
Silicon	3.33E+04	ug/g
Silver	3.95E+01	ug/g
Sodium	1.42E+05	ug/g
Strontium	7.05E+01	ug/g
Zinc	2.06E+02	ug/g
Zirconium	4.92E+02	ug/g
Nitrate	3.54E+04	ug/g
TOC	3.76E+03	ug/g
Uranium	6.60E+03	ug/g
Radiological Analysis		
Pu 239, 240	4.74E-01	uCi/g
C-14	2.13E-03	uCi/g
Sr-90	2.27E+02	uCi/g
Tc-99	3.63E-02	uCi/g
Am-241	1.65E+00	uCi/g
Co-60	2.59E-01	uCi/g
Cs-137	6.23E+01	uCi/g
I-129	3.70E-05	uCi/g
Total Gamma	1.01E+02	uCi/g
Radiation	2.00E+02	mR/h

Waste Tank 105 BX		
Data Transmittal Package for 241 BX 105 Waste Tank Characterization		
January 21, 1988		
Date Received: January 5, 1988		
COMPONENT	MAXIMUM TOTAL	LAB UNIT
Physical Data		
Mass (Total)	1.02E+02	ug/g
Bulk Density	1.79E+00	ug/g
Chemical Analysis		
Aluminum	5.09E+04	ug/g
Barium	3.95E+03	ug/g
Bismuth	2.68E+02	ug/g
Boron	4.52E+00	ug/g
Cadmium	2.50E+01	ug/g
Calcium	7.26E+03	ug/g
Chromium	2.53E+03	ug/g
Cobalt	0.00E+00	ug/g
Copper	2.20E+01	ug/g
Iron	2.08E+03	ug/g
Lead	2.96E+02	ug/g
Magnesium	3.90E+03	ug/g
Manganese	4.22E+02	ug/g
Nichel	7.39E+01	ug/g
Phosphorus	7.85E+03	ug/g
Potassium	1.50E+03	ug/g
Silicon	4.97E+04	ug/g
Silver	1.21E+01	ug/g
Sodium	7.78E+04	ug/g
Strontium	4.19E+01	ug/g
Zinc	7.93E+01	ug/g
Zirconium	1.78E+02	ug/g
Nitrate	3.11E+04	ug/g
TOC	1.80E+03	ug/g
Uranium	2.21E+03	ug/g
Radiological Analysis		
Pu 239, 240	8.47E-02	uCi/g
C-14	4.40E-04	uCi/g
Sr-90	4.59E+01	uCi/g
Tc-99	3.06E-02	uCi/g
Am-241	3.36E-01	uCi/g
Co-60	5.61E-02	uCi/g
Cs137	4.59E+01	uCi/g
I-129	2.30E-05	uCi/g
Total Gamma	5.23E+01	uCi/g
Radiation	4.00E+01	uCi/g

Waste Tank		
Analysis Of Tank Farm Samples		
April 12, 1974		
Sample: T-3060		
COMPONENTS	LAB VALUE	LAB UNIT
Physical Data		
Vis-OTR: Yellow, Clear, No solids 150 mrads/hr		
pH	12.45	
SpG	1.2098	
H ₂ O	73.3	%
Chemical Analysis		
OH	0.626	M
Al	5.05E-02	M
Na	4.98	M
NO ₂	1.62	M
NO ₃	1.33	M
SO ₄	0.144	M
PO ₄	5.28E-02	M
F	9.02E-03	M
CO ₃	0.461	M
Pu	9.86E-06	g/l
Radiological Analysis		
134 Cs	1.29E+03	uCi/gal
137 Cs	5.83E+05	uCi/gal

Waste Tank 106-BX		
ANALYSIS OF TANK FARM SAMPLES		
June 7, 1974		
Sample: T-3766		
COMPONENT	LAB VALUE	LAB UNITS
Physical Data		
Vis-OTR	Yellow, Clear, No solids. 100 mrad/hr.	
pH	11.9	
SpG	1.194	
%H2O	75.22	%
Chemical Analysis		
OH	0.721	M
Al	4.28E-02	M
Na	5.22	M
NO2	3.69	M
NO3	1.27	M
SO4	0.175	M
PO4	5.54E-02	M
F	6.20E-03	M
CO3	0.552	M
Radiological Analysis		
Pu	9.39E-06	g/l
GEA:134 Cs	1.23E+02	uCi/gal
GEA: 137 Cs	2.31E+05	uCi/gal

Waste Tank 106-BX		
ANALYSIS OF TANK FARM SAMPLES		
December 4, 1974		
Sample: T-8441		
COMPONENT	LAB VALUE	LAB UNITS
Physical Data		
Vis-OTR Green ,10% solids. 0.45 Rad/hr.		
pH	> 14	
SpG	1.4901	
%H2O	43.35	%
Chemical Analysis		
OH	3.33	M
Al	2.89	M
Na	12.55	M
NO2	1.954	M
NO3	2.76	M
SO4	Insufficient Sample	M
PO4	1.18E-02	M
F	Insufficient Sample	M
CO3	0.244	M
Radiological Analysis		
Pu	<5.34E-06	g/gal
GEA:134 Cs	9.95E+03	uCi/gal
GEA: 137 Cs	1.46E+06	uCi/gal
89,90 Sr	Insufficient Sample	

Waste Tank 106-BX		
ANALYSIS OF TANK FARM SAMPLES		
October 27, 1975		
Received: April 21, 1975		
Sample: T-3855		
COMPONENT	LAB VALUE	LAB UNITS
Physical Data		
Vis-OTR	Light Brown, <10% Solids. 1 Rad/hr.	
pH	13.92	
SpG	1.3739	
%H2O	57.8	%
Chemical Analysis		
OH	2.09	<u>M</u>
Al	1.15	<u>M</u>
Na	7.10	<u>M</u>
NO2	1.94	<u>M</u>
NO3	2.43	<u>M</u>
SO4	Cancelled	<u>M</u>
PO4	2.41E-02	<u>M</u>
F	9.59E-03	<u>M</u>
CO3	0.264	<u>M</u>
Radiological Analysis		
Pu	4.00E-04	g/gal
GEA:134 Cs	8.45E+03	uCi/gal
GEA: 137 Cs	1.28E+06	uCi/gal
89,90 Sr	7.24E+04	uCi/gal

Waste Tank BX-106			
March 16, 1990			
Supernate Liquid R6037			
Component	Lab Value	Lab Unit	Wt %
Physical Data			
Density	1.33	g/ml	
% H2O	63.8	wt %	
pH	13.28		
Chemical Analysis			
Al	2.83E-01	M	0.58
Ca	2.48E-04	M	0
Cr	2.31E-02	M	0.09
Hg	0.00E+00	M	0
K	1.11E-01	M	0.33
Na	7.05E+00	M	12.23
P	1.99E-02	M	0.05
U	7.36E-03	g/l	
Cl-	9.65E-02	M	0.26
F-	<7.80E-02	M	
NO2-	1.69E+00	M	5.88
NO3-	2.62E+00	M	12.25
(PO4)3-	<1.58E-01	M	
(SO4)2-	<1.60E-01	M	
OH-	2.07E+00	M	2.65
(CO3)2-	9.33E-01	M	4.23
TOC	4.4	g/l carbon	
Radiological Analysis			
Supernate			
AT	5.37E+00	uCi/l	
TB	2.44E+05	uCi/l	
Cs-137 (water)	1.81E+05	uCi/l	
Cs-137 (acid)	1.96E+05	uCi/l	
Sr-89/90	5.16E+02	uCi/l	
Pu-239/240	1.29E-01	uCi/l	
Am-241	<2.38E-01	uCi/l	
Slurry			
Cs-137	1.77E+05	uCi/l	
Sr-89/90	6.50E+02	uCi/l	
Pu-239/240	2.51E-01	uCi/l	
Am-241	3.93E-01	uCi/l	

Waste Tank 107 BX		
Analysis Of Tank Farm Samples		
Sample T-5921 107BX		
November 20, 1974		
COMPONENTS	LAB VALUE	LAB UNIT
Physical Data		
Vis-OTR: Clear, yellow, no solids 300 mRad/hr		
pH	10.18	
SpG	1.238	
% H2O	75.28	
Chemical Analysis		
OH	0.723	M
Al	1.53 E-03	M
Na	5.29	M
NO2	1.82	M
NO3	1.51	M
SO4	Deleted by R.L. Walser	
PO4	6.15 E-02	M
F	2.16 E-02	M
CO3	0.674	M
Radiological Analysis		
GEA 134 Cs	7.38 E+02	uCi/gal
GEA 137 Cs	7.38 E+05	uCi/gal

Waste Tank 107-BX				
107-BX Core Segments				
May 2, 1979				
LAB VALUE				
COMPONENTS	NO. 1	NO. 2	NO. 3	Lab Unit
Physical Data				
Visible: Yellowish, with red streaking, consistency of soft putty.				
Bulk Density	1.42	1.42	1.54	g/cc
Percent water	53.0	55.0	53.0	%
Radiological				
Cs 134	8.8	3.3	5.2	uCi/kg
Cs 137	2.01E+05	8.21E+04	1.10E+05	uCi/kg
Eu 154	24.0	12.0	21.0	uCi/kg
Eu 155	1.35E+03	68.0	1.01E+03	uCi/kg
Radiation Readings Mr/hr				
Surface	200	75	50	
Open	1800	600	200	
Core Segment Composite Data (Water Soluble Solids)				
Sr 89 + 90	0.003			uCi/kg
Cs 137	2.74			uCi/kg

Waste Tank 107 BX		
Statistical Analysis of 107 BX Core Segments		
May 15, 1979		
Components	95% Confidence Interval (uCi/kg)	Lab Unit
Cs 134	(6.443E-01 , 4.402E+01)	uCi/kg
Cs 137	(1.733E+03 , 8.634E+04)	uCi/kg
Eu 154	(3.726 , 8.938E+01)	uCi/kg
Eu 155	(2.236E+01 , 4.233E+02)	uCi/kg

Waste Tank BX-107			
Analysis of Composite on Solids			
July 25, 1979			
Components	Lab Value		Lab Unit
	Water Soluble	Water Soluble (KOH Fusion)	
Physical Data			
Bulk Density	1.46		g/cc
H2O	54.0		%
TOC**	NR	7.30E-04	g/g
Chemical Analysis			
Al(+3)	NR*	1.6	%
Bi(+3)	0.03	1.6	%
Cd(+2)	NR	<0.003	%
CO3(-2)	0.1	NR	%
Cr +	0.007	NR	%
F-	0.09	0.13	%
Fe(+3)	NR	1.4	%
Hg(+2)	NR	0.01	%
La(+3)	NR	0.04	%
Mn(+2)	NR	0.005	%
Na +	6.5	NR	%
Ni(+2)	<0.001	0.5	%
OH-	<0.04	NR	%
Pb(+2)	<0.03	1.3	%
PO4(-3)	1.5	7.1	%
SiO4	0.02	0.3	%
SO4(-2)	0.8	0.12	%
NO3-	14.0	1.3	%
Radiological Analysis			
Am	NR	2.70E-09	g/g
137Cs +	2.74	8.40	uCi/g
239Pu***	8.51E-11 g/g	1.75E-06	g/g
89 + 90Sr(+2)	0.004	14.20	uCi/g
U (+6)***	5.5E-3	8.00E-05	g/g
* Not Requested			
**Total Organic Carbon			
*** All Valance States			

Waste Tank 107- BX			
Chemical Characterization			
September 18, 1980			
Components	Lab Value		Lab Units
	H2OSoluble	H2O Insoluble	Wt. %
Physical Data			
TOC	NR	7.30E-04	g/g
Chemical Analysis			
Al(3+)	NR	1.64	%
Bi(3+)	< 3.4E-02	1.61	%
Cd	NR	1.50E-03	%
Cl-	NR	NR	%
CO3(2-)	1E-01	NR	%
Cr(3+)	6.87E-03	NR	%
Fe(3+)	NR	1.43	%
F-	8.70E-02	1.00E-01	%
Hg(2+)	NR	1.31E-01	%
La(3+)	NR	4.38E-02	%
Mn(2+)	NR	5.27E-03	%
Na+	6.48	9.91E+01	%
		1.10E+02 *	%
Ni(2+)	< 1.6E-03	5.04E-01	%
NO3-	1.40E+01	1.3	%
OH-	< 5E-02	NR	%
Pb4(2+)	< 2E-03	NR	%
PO4(3-)	1.5	7.2	%
Si	1.80E-02	1.27E-01	%
SO4(2-)	8.10E-01	1.20E-01	%
Zr	NR	NR	%
Radiological Analysis			
241Am	NR	2.70E-09	g/g
137Cs	2.74	8.37	uCi/g
Pu	8.51E-11	1.75E-06	g/g
89/90Sr	2.30E-03	1.42E+01	uCi/g
U	5.50E-07	7.99E-05	g/g
144Ce	< 2.54E-02	8.37	uCi/g
*Rerun			
NR = Not Requested			

Waste Tank BX-107			
Supernate Liquid 241-BX-107			
Sample: R6038 March 16, 1990			
Components	Lab Value	Lab Unit	Weight %
	Concentration		
Physical Data			
Density	1.22		g/ml
H2O	72		%
TOC	2.7	g/L carbon	
pH	9.64		
Chemical Analysis			
Ba	6.53E-05	M	0
Cr	6.59E-03	M	.0.03
Cu	7.84E-05	M	0
Fe	4.64E-04	M	0.03
Hg	0.00E+00	M	0
K	1.23E-02	M	0.04
Mo	6.13E-04	M	0
Na	4.22E+00	M	7.94
P	1.70E-01	M	0.43
Pb	1.64E-04	M	0
Si	9.29E-03	M	0.02
U	8.58E-01	g/l	0.07
Cl-	6.09E-02	M	0.18
F-	<7.47E-02	M	
NO2-	7.43E-01	M	2.8
No3-	2.64E+00	M	13.41
PO4---	1.62E-01	M	
SO4--	1.81E-01	M	1.42
OH-	1.09E-01	M	0
Co3--	2.74E-01	M	1.35
Total			27.7
Radiological Analysis			
AT	2.90E+01	uCi/L	
TB	2.88E+04	uCi/L	
Cs-137(water)	2.49E+04	uCi/L	
Cs-137(acid)	2.48E+04	uCi/L	
Sr 89/90	5.71E+01	uCi/L	
Pu-239/240	4.24E+00	uCi/L	
Am-241	2.49E-01	uCi/L	

Waste Solutions BX-109.1		
Analysis Of Alkaline Waste Solutions		
May 20, 1975		
COMPONENT	LAB VALUE	
	Concentration	Weight %
Physical Data		
Density	1.311	g/ml
at *C	85	
Chemical Analysis		
NaAlO ₂	0.005	<0.1
NaH ₂ O ₂	1.33	7.0
NaH ₂ O ₃	4.50	29.2
NaOH	<0.01	<0.1
Na ₂ CO ₃	0.29	2.3
Na ₃ PO ₄	0.29	2.2
Na ₂ SiO ₃	0.005	<0.1
NaF	<0.001	<0.1
Radiological Analysis		
137 Cs	4.32 x 10E+04	uCi/l
134 Cs	--	--
125 Sb	--	--
239 + 240	4.14	uCi/l
238 Pu	0.17	uCi/l
237 Pu	0.01	uCi/l
241 Am	0.01	uCi/l

Waste Tank 110-BX		
ANALYSIS OF ALKALINE WASTE SOLUTIONS		
May 20, 1975		
COMPONENTS	LAB VALUE	WEIGHT PERCENT
Physical Data		
Density at *C	1.414 g/ml 63	
H2O		52.5%
Chemical Analysis		
NaAlO ₂	1.90 M	11.0
NaNO ₂	1.47 M	7.2
NaNO ₃	3.74 M	22.5
NaOH	3.28 M	9.3
Na ₂ CO ₃	0.23 M	1.7
Na ₃ PO ₄	0.01 M	0.1
Na ₂ SiO ₃	0.008 M	<0.1
NaF	0.046 M	0.1
Total		104.4
Radiological Analysis		
¹³⁷ Cs	3.45E+05	uCi/l
¹³⁴ Cs	1.28E+03	uCi/l
²³⁹ , ²⁴⁰ Pu	0.140	uCi/l
²³⁸ Pu	0.01	uCi/l
²³⁷ Np	0.005	uCi/l
²⁴¹ Am	0.060	uCi/l

Waste Tank 110-BX		
ANALYSIS OF ALKALINE WASTE SOLUTIONS		
May 20, 1975		
COMPONENTS	LAB VALUE	LAB UNIT
Radiological Analysis		
137 Cs	1.23E+03	uCi/l
155 Eu	3.01E+02	uCi/l
106 Rh	3.28E+02	uCi/l
57 Co	39.8	uCi/l
60 Co	2.26E+03	uCi/l

Waste Tank 110-BX			
Physical and Chemical Characterization of Core Segment #3			
ANALYSIS OF LARGE RED CRYSTALS			
February 14, 1979			
COMPONENTS	WATER SOLUBLE	ACID (FUSION)	LAB UNIT
Physical Data			
Water Solubility	99 +		%
Bulk Density	1.71		g/cc
Percent Water	30.0		%
Chemical Analysis			
Bi3 +	<0.2		%
CrO4-	0.07		%
F-	1.5		%
Fe*	0.003		%
NO3-	20.8		%
Na +	20.6		%
OH-	2.2		%
PO4 ³⁻	10.0		%
U*	6.48 E-06		g/g
Pu*	5.41 E-07		g/g
SO4 ²⁻	1.3		%
SiO2 ²⁻	0.1		%
Zr	<0.03		%
Radiological Analysis			
89 + 90 Sr2 +	0.028		uCi/g
137 Cs	47.7		uCi/g
*All oxidation states			

Waste Tank 110-BX			
CHEMICAL AND PHYSICAL ANALYSIS (CONTENT & PERCENT)			
February 14, 1979			
SAMPLE 1010-C (Core Segment #3)			
COMPONENTS	WATER SOLUBLE	ACID (FUSION)	LAB UNIT
Physical Data			
Visible: Sludge is yellowish to a dual gray in color, consistency like soft putty.			
Bulk Density	1.440		g/cc
Percent Water	42.0		
Water Solubility	40		%
Chemical Analysis			
Al*	<0.1	1.8	%
Bi3 +	<0.01	3.3	%
CO3 ²⁻	<0.01	--	%
CrO2-	<0.01	0.30	%
F-	0.2		%
Fe*	0.03	1.4	%
La3 +	--	0.02	%
Na +	17		%
NO3-	20		%
PO4 ³⁻	1.8	9.8	%
SO4 ²⁻	1.2		%
SiO2 ²⁻	<0.2	1.4	%
U*	5.07E-06	4.23E-04	g/g
239 Pu*	5.57E-10	2.13E-06	g/g
Total Organic C	0.01	0.06	%
Radiological Analysis			
89 + 90Sr2 +	5.73E-04	7.8	uCi/g
137 Cs +	11.8	35.5	uCi/g
*All oxidation states			

Waste Tank 110-BX			
CHEMICAL CHARACTERIZATION			
September 18, 1980			
COMPONENTS	LAB VALUE	LAB UNIT	
Physical Data			
H2O	51.9	%	
Bulk Density	1.45	g/cm3	
ION/RADIONUCLIDE	H2O SOLUBLE WT%	H2O INSOLUBLE WT%	LAB UNIT
Chemical Analysis			
Al 3 +	NR	1.84	%
Bi3 +	<1.03E-02	3.84	%
Cd	<3.36E-02	NR	%
Cr3 +	<8.18E-03	1.31E-01	%
Fe 3 +	<4.15E-04	1.41	%
F-	1.70E-01	Deleted	%
La3 +	NR	1.51E-02	%
Na +	1.32E+01	NR	%
NO3-	1.40E+01	NR	%
PO4^3-	1.93	9.81E-02	%
Si	NR	1.78E-01	%
SO4^2-	5.76E-01	<2.91E-01	%
Zr	NR	<3.1E-02	%
Pu	5.57E-05	2.13E-06	g/g
U	5.08E-06	4.23E-05	g/g
TOC	1.69E-04	6.00E-04	g/g
Radiological Analysis			
137 Cs	1.18E+01	3.55E+01	uCi/g
	1.18E+01	3.74E+01	uCi/g
89 + 90 Sr	5.59E-04	7.79	uCi/g
*Rerun			
NR = Not Requested			

Waste Tank 110-BX			
SUPERNATE LIQUID 110-BX			
March 16, 1990			
Sample: R6040			
COMPONENT	CONCENTRATION	LAB UNIT	Wt. %
Physical Data			
pH	12.5		
DENSITY	1.37	g/ml	
H2O	56.6	%	
Chemical Analysis			
Al	1.96E-02	M	0.04
Ca	2.24E-04	M	0.00
Cr	1.87E-02	M	0.07
Hg	0.00E+00	M	0.00
K	7.48E-02	M	0.21
Mo	6.98E-04	M	0.00
Na	7.14E+00	M	12.00
P	1.31E-02	M	0.03
Si	1.56E-03	M	0.00
U	4.29E-03	g/l	0.00
Cl-	1.38E-01	M	0.36
F-	<7.42E-02	M	
NO2-	7.94E-01	M	2.67
NO3-	5.04E+00	M	22.83
PO4 ³⁻	<1.50E-01	M	
SO4 ²⁻	<1.52E-01	M	
OH-	1.38E+00	M	1.71
TOC	5.6	g/l carbon	
CO3-	2.87E-01		1.26
TOTAL			41.19
Radiological Analysis			
Cs - 137 (water)	1.35E+05	uCi/l	
Cs - 137 (acid)	1.31E+05	uCi/l	
Sr - 89/90	1.50 E+05	uCi/l	
AT	<4.24E00	uCi/l	
TB	1.67E+05	uCi/l	
Pu - 239/240	<7.99E-02	uCi/l	
Am - 241	<2.60E-01	uCi/l	

Waste Tank 111-BX			
SUPERNATE LIQUID 111-BX			
March 16, 1990			
R6041			
COMPONENTS	LAB VALUE	LAB UNIT	Wt. %
Physical Data			
Density	1.14	g/ml	
H2O	53.3		
pH	12.7		
Chemical Analysis			
Al	1.45E+00	M	2.71
Ca	2.48E-04	M	0.00
Cr	9.14E-03	M	0.03
Hg	<1.3E-07	M	
K	1.64E-01	M	0.45
Na	9.33E+00	M	14.90
P	1.29E-02	M	0.03
Si	2.28E-03	M	0.00
Zn	1.58E-04	M	0.00
U	7.65E-03	g/l	0.00
Cl-	1.40E-01	M	0.35
F-	<7.68E-02	M	
NO2-	1.38E+00	M	4.43
NO3-	2.62E+00	M	11.28
PO4---	<1.56E-01	M	
SO4--	<1.58E-01	M	
OH-	3.43E+00	M	4.05
CO3-	5.98E-01		2.50
TOTAL			40.73
TOC	5.7	g/l carbon	
Radiological Analysis			
U	7.65E-03	g/l	0.0 Wt. %
AT	7.1	uCi/l	
TB	3.17E+05	uCi/l	
Cs - 137 (water)	2.59E+05	uCi/l	
Cs - 137 (acid)	2.51E+05	uCi/l	
Sr - 89/90	1.99E+01	uCi/l	
Pu - 239/240	8.58E-02	uCi/l	
Am - 241	<1.38E-01	uCi/l	
*Neutralization Titration of the sample at approximately pH 7.5			

Waste Tank 112-BX			
Chemical and Physical Characterization of Core Segments (Tables I and II)			
August 15, 1979			
Received: June 11, 1979			
COMPONENT	WATER SOLUBLE	WATER INSOLUBLE	LAB UNIT
Physical Data			
Visible: Light yellow in color, having a consistency of soft putty.			
Bulk Density	1.22 (Average of 3 Core Segments)		g/cc
H2O	6.26 (Average of 3 Core Segments)		%
Chemical Analysis			
Al (3+)	NR	3.9	%
Bi (3+)	<0.01	3.8	%
CO3 (2-)	<0.2	NR	%
Cr (3+)	0.01	0.2	%
F-	0.03	1.8	%
Fe*	NR	0.6	%
Hg (2+)	NR	0.01	%
Cd (2+)	NR	<0.003	%
Mn (4+)	NR	0.02	%
Ni (2+)	<0.001	4.4	%
Pb (2+)	<0.004	NR	%
NO3-	9.2	5.0	%
Na+	5.4	5.8	%
OH-	pH.7	NR	%
PO4 (3-)	6.2	4.80	%
SO4 (2-)	0.6		%
Si (4+)	0.2	1.9	%
TOC**	1.22E-03	8.93E-03	g/g
U	7.92E-07	1.40E-03	g/g
239 Pu	2.97E-04	7.46E-06	g/g
241 Am	NR	2.03E-08	g/g
Zr (4+)	<0.1	NR	%
Radiological Analysis			
89,90 Sr (2+)	3.19E-03	20.5	uCi/g
137 Cs	6.98	59.7	uCi/g
NR-- Not Requested.			
*-- All Oxidation States.			
**-- Total Organic Carbon.			

Waste Tank 112-BX		
CHEMICAL CHARACTERIZATION		
September 18, 1980		
COMPONENT	H2O SOLUBLE Wt%	H2O INSOLUBLE Wt%
Chemical Analysis		
Al (3+)	NR	3.9
Bi (3+)	<1E-02	3.83
Cd	NR	<5E-03
Cl-	2.52E-01	NR
CO3 (2-)	<2E-01	NR
Cr (3+)	1.02E-02	2.37E-01
Fe(3+)	NR	5.53E-01
F-	2.60E-01	1.80
Hg (2+)	NR	4.51E-01
La (3+)	NR	4.74E-01
Mn (2+)	NR	1.88E-02
Na+	5.4	5.82
Ni (2+)	<1E-03	4.40
NO3-	9	5.0
Pb (2+)	<3E-03	NR
PO4 (3-)	6.2	4.77
Si	8.18E-02	8.80E-01
SO4 (2-)	5.49E-01	<2E+01
Zr	<1.1E-01	NR
TOC	1.22E-03 g/g	8.93E-03 g/g
241-Am	NR	2.0E-08 g/g
Pu	2.97E-09 g/g	7.46E-06 g/g
U	7.92E-07 g/g	1.4E-03 g/g
Radiological Analysis		
137- Cs	6.98 uCi/g	5.97E+01 uCi/g
89,90 Sr	3.19E-03 uCi/g	2.05E+01 uCi/g
NR-- Not Requested.		

Date: March 8, 1976

To: W. R. Christensen

From: *W. R. Christensen*
O. E. Horton - 2-2529

Subject: ANALYSIS OF SLUDGE SAMPLE FROM TANK 101-BX

We received a sludge sample from Tank 101-BX on January 26, 1976. The sample volume was small but adequate for laboratory analysis. The sludge solids were dark brown in color. The calculated heat generation rate, based on $^{89+90}\text{Sr}$ and ^{137}Cs content, was 1.80×10^{-2} watts/liter.

Sludge analyses were made by fusing 1.8 milliliters of solids with KOH, dissolving the melt with concentrated hydrochloric acid, and diluting to a volume of 275 milliliters with water. Analyses are reported in the table.

If you have any questions regarding this work, please call me.

ANALYSIS OF 101-BX TANK SLUDGE

Bulk Density	1.68	g/cc	
Particle Density	1.98	g/cc	
%H ₂ O	29.1		
Al	10.0	moles/l	
Fe	0.4	moles/l	
NO ₃	4.0	moles/l	
Mg	0.08	moles/l	
Mn	0.2	moles/l	
Ca	0.1	moles/l	
Ba	0.01	moles/l	
Si	1.6	moles/l	
PO ₄	0.1	moles/l	
Pu	1.45×10^{-3}	g/l	
$^{89+90}\text{Sr}$	1.8	Ci/l	1.20×10^{-2} watts/l
^{137}Cs	1.2	Ci/l	5.95×10^{-3} watts/l

JEH:ms

cc: H Babad
JS Buckingham
RG Geier
SS Koegler
DC Lini
WP Metz

RE Van der Cook
RL Walser
RA Watrous ←
Process Aids (7)
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INVESTIGATION AND EVALUATION OF
102-BX TANK LEAK

J. C. Womack and D. J. Larkin
Waste Management Process Engineering Section
Operations Support Engineering Department

March 26, 1971

Work performed under Contract AT(45-1)-2130
between the Atomic Energy Commission and
Atlantic Richfield Hanford Company
Richland, Washington 99352

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INVESTIGATION AND EVALUATION OF

102-BX TANK LEAK

J. C. Womack and D. J. Larkin

March 26, 1971

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INVESTIGATION AND EVALUATION OF
102-BX TANK LEAK

INTRODUCTION

A responsibility of the Atlantic Richfield Hanford Company Waste Management Program is to provide surveillance in the waste storage tank farms to confine the high-level boiling and non-boiling wastes. Since 1943, 151 waste tanks located in 13 tank farms have been constructed at Hanford. To date, leaks have been confirmed in eleven tanks located in four of the farms, and six other tanks are suspected leakers. Inventory data from the suspect tanks indicated relatively small losses of liquid waste, and in some cases radioactivity had been noted in adjacent monitoring wells. All suspect as well as leaking tanks have been removed from service.

One of these suspected leaking tanks is 241-BX-102 and the purpose of this document is to report the findings of a field investigation to determine if radioactive wastes had indeed leaked from this tank, and if so, estimate the volume lost and extent of waste liquid movement through the soil.

SUMMARY AND CONCLUSIONS

Based on analyses of liquid level history, test well radiation profiles and soil sampling and analyses, tank 102-BX has been confirmed as a leaker. The most probable explanation of the tank 102-BX leak is as follows:

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TABLE I
TANK 102-BX LIQUID SAMPLE ANALYSES

<u>Sample T-83, January 27, 1970</u>	<u>Sample #527, March 1, 1970</u>	<u>Sample #3270, April 30, 1970</u>
^{137}Cs = $2.76 \times 10^5 \mu\text{Ci/gal}$	^{137}Cs = $1.17 \times 10^5 \mu\text{Ci/gal}$	^{137}Cs = $7.26 \times 10^5 \mu\text{Ci/gal}$
^{134}Cs = $6.45 \times 10^3 \mu\text{Ci/gal}$	^{125}Sb = $2.07 \times 10^3 \mu\text{Ci/gal}$	^{134}Cs = $2.33 \times 10^4 \mu\text{Ci/gal}$
^{90}Sr = $164 \mu\text{Ci/gal}$	^{60}Co = $2.77 \times 10^2 \mu\text{Ci/gal}$	-
$^{106}\text{RuRh}$ = 0.0462 Ci/gal	$^{106}\text{RuRh}$ = $4.35 \times 10^4 \mu\text{Ci/gal}$	-
OH^- = 1.16M	$^{95}\text{ZrNb}$ = $2.80 \times 10^3 \mu\text{Ci/gal}$	-
Na^+ = 3.07M	-	-
pH = 12.6	-	-
SpG = 1.03	-	-
NVR = 242 g/l	-	-

TABLE II
GROUND WATER SAMPLE ANALYSES JANUARY 15, 1971

Well No.	Dir. From TK-102-BX	Filtrates (nCi/l)***						Residue on Filters (nCi/g, wet)			
		Calc.as TP	GEA			106RuRh	106Ru	137Cs	106Ru	137Cs	60Co
			137Cs	106Ru	60Co						
299E 33-1 **	N	10.4	<0.014	1.7 ±0.22	6.8	0.44 ±0.12		<0.010	<0.083		0.50
299E 33-5	NW	11	<0.025	3.0	3.8	0.32 ±0.069		0.037 ±0.033	<0.34		0.16 ±0.058
299E 33-8	NW	0.56	<0.034	0.19 ±0.12	<0.031	0.20 ±0.19		0.11 ±0.04	<0.17		<0.035
299E 33-10	WSW	0.039 ±0.035	<0.017	<0.099	<0.019	0.046 ±0.040		<0.029	<0.11		<0.021
299E 33-13 **	NNW	8.8	<0.060	0.96 ±0.24	7.8	0.052 ±0.065		<0.037	<0.13		0.42 ±0.044
299E 33-18 *	E	<0.610	<0.770	-	0.850	-		-	-		-
299E 33-21	WSW	0.32	0.100 ±0.024	<0.12	<0.026	1.1 ±0.36		0.90	<0.16		<0.029
299E 33-27	-	-	9.2	<0.23	<0.030	-		39	0.42		0.03
299E 28-8	S	-	<0.021	<0.10	0.08 ±0.02	-		<0.007	<0.036		0.017 ±0.005

* Sample taken October 1970

** Values of residue on filters may be only one-half their actual value.

*** 1 uCi = 1000 nCi
AEC control limits(8): 137Cs = 20 nCi/l; 106Ru = 10 nCi/l; 60Co = 50 nCi/l

Date: December 13, 1974
To: R. L. Walser
From: R. E. Wheeler *R. Wheeler*
Subject: ANALYSIS OF TANK FARM SAMPLES
SAMPLE: T-8511 102 BX Rec. 9/30/74
↑

Vis-OTR: Clear yellow. < 1% solids. 1.5 Rad/hr
pH: 14
SpG: 1.4669
OH: 2.48 M
Al: 2.0 M
Na: 11.39 M
NO₂: 2.17 M
NO₃: 2.92 M
Pu: < 6.21 x 10⁻⁶ g/gal
DTA: No exotherm below 200°C
SO₄: Cancelled by R. L. Walser
PO₄: 2.65 x 10⁻² M
F: 9.18 x 10⁻³ M
CO₃: 0.274 M
GEA: ¹³⁴Cs - 1.17 x 10⁴ μCi/gal
¹³⁷Cs - 1.38 x 10⁶ μCi/gal
^{89,90}Sr: 1.50 x 10³ μCi/gal
Water: 49.30%
Cooling Curve: 25°C for 45 min. No solids.
20°C for 45 min. No solids.
15°C for 45 min. No solids.
10°C for 45 min. No solids.
5°C for 45 min. No solids.

REW:jd

cc: JS Buckingham
WR Christensen
RM Ginestet
LG Johnson
RE Wheeler
JC Womack

TCRC-1

Atlantic Field Hanford Company

WHC-SD-WM-ER-311, Rev. 0

Date: November 25, 1974

To: R. L. Walser

From: R. E. Wheeler *R. Wheeler*

Subject: ANALYSIS OF TANK FARM SAMPLES
SAMPLE: T-8630 103-BX *4*

Vis-OTR: Yellow. No solids. .15 Rad/hr

pH: 12.9

SpG: 1.063

OH: 0.353 M

Al: 2.61×10^{-2} M

Na: 1.44 M

NO₂: 0.292 M

NO₃: 0.274 M

Pu: 2.53×10^{-5} *g/gal*

DTA: No exotherm

SO₄: Cancelled by R. L. Walser

PO₄: 4.01×10^{-2} M

F: 1.11×10^{-2} M

CO₃: 0.204 M

GEA: ¹⁰⁶RuRh - 9.61×10^4 μ Ci/gal
¹³⁷Cs - 1.12×10^5 μ Ci/gal

^{89,90}Sr: 1.57×10^2 μ Ci/gal

Water: 93.28%

Cooling Curve: 25°C for 60 min. No solids.
20°C for 45 min. No solids.
15°C for 45 min. No solids.
10°C for 85 min. No solids.
5°C for 45 min. No solids.

REW:jd

cc: JS Buckingham
WR Christensen
RM Ginestet
RE Wheeler
JC Womack

Atlantic Richfield Hanford Company

Date: March 27, 1975
To: R. G. Geier
R. L. Walser
From: R. E. Wheeler *R. E. Wheeler*
Subject: ANALYSIS OF TANK FARM SAMPLES
SAMPLE: T-2764 103-BX ✓
RECEIVED - MARCH 17, 1975

Vis-OTR: Brown <1% Solids 900 m/Rad/Hr
OH: 0.359M
Ph: 12.7
D.T.A.: No Exotherm below 200°C
SpG: 1.0373
GEA: $^{134}\text{CS} - 7.70 \times 10^3 \mu\text{Ci/gal}$
 $^{137}\text{CS} - 6.52 \times 10^5 \mu\text{Ci/gal}$
 $^{125}\text{SB} - 9.24 \times 10^3 \mu\text{Ci/gal}$
Water: 81.93%
Cooling Curve: 25°C for 60 min. No solids
20°C for 60 min. No solids
15°C for 60 min. No solids
10°C for 60 min. No solids
5°C for 60 min. No solids

REW:vmk

cc: JS Buckingham
WR Christensen
RM Ginestet
JC Womack
RE Wheeler

Atlantic Richfield Hanford Company

R. L. Walser

Page 2

October 27, 1975

 $^{89,90}\text{Sr}$: 3.48×10^4 $\mu\text{Ci/gal}$

Cooling Curve: 20°C for 45 min. No solids.
15°C for 45 min. No solids.
10°C for 45 min. No solids.
5°C for 60 min. No solids.

REW:eyw

cc: JS Buckingham
WR Christensen
RM Ginestet
RE Wheeler
JC Womack

Atlantic Richfield Hanford Company

Date: September 23, 1975

To: R. L. Walser

From: R. E. Wheeler, 2-2449 *R. E. Wheeler*

Subject: ANALYSIS OF TANK FARM SAMPLES

Sample: T-5455 Tank: 103-BX ✓

Received: June 18, 1975

Vis-OTR: Brown No solids 600 mrad/hr

pH: 11.8

SpG: 1.1243

OH: 0.788 MAl: 6.05×10^{-3} MNO₂: 0.908 MNO₃: 0.433

D.T.A.: No exotherm below 200°C

Co₃: 0.620 M

GEA: ¹³⁴Cs - 9.24×10^2 μ Ci/gal
¹³⁷Cs - 1.79×10^5 μ Ci/gal
¹⁰⁶RuRh - 2.21×10^5 μ Ci/gal

^{89,90}Sr: 6.01×10^4 μ Ci/gal

Water: 99.14 %

Cooling Curve: 25°C for 45 min. No solids.
 20°C for 60 min. No solids.
 15°C for 45 min. No solids.
 10°C for 45 min. No solids.
 5°C for 45 min. No solids.

REW:eyw

cc: JS Buckingham
 WR Christensen
 RM Ginestet
 RE Wheeler
 JC Womack

Atlantic Richfield Hanford Company

Date: December 18, 1975
 To: R. L. Walser
 From: R. E. Wheeler, 2-2449 *R. E. Wheeler*
 Subject: ANALYSIS OF TANK FARM SAMPLES
 Sample: T-9138 Tank: 103-BX ✓
 Received: October 23, 1975

Vis-OTR: Yellow No solids 300 mrad/hr

pH: 10.6

SpG: 1.103

OH: $< 4.74 \times 10^{-3} \text{ M}$

Al: $2.51 \times 10^{-3} \text{ M}$

Na: 1.98 M

NO₂: 0.433 M

NO₃: 0.339 M

Pu: $4.92 \times 10^{-4} \text{ gm/gal}$

D.T.A.: No exotherm

SO₄: Cancelled

PO₄: $1.09 \times 10^{-2} \text{ M}$

Cl: $1.1 \times 10^{-2} \text{ M}$

F: $3.84 \times 10^{-3} \text{ M}$

CO₃: 0.555 M

GEA: ¹⁰⁶RuRh - $1.58 \times 10^5 \text{ pCi/gal}$
¹³⁴Cs - $8.46 \times 10^2 \text{ pCi/gal}$
¹³⁷Cs - $1.09 \times 10^5 \text{ pCi/gal}$

^{89,90}Sr: $1.68 \times 10^4 \text{ pCi/gal}$

Water: 86.18 %

Atlantic Richfield Hanford Company

R. L. Walser
December 18, 1975
Page 2

Cooling Curve: 35°C for 35 min. No solids.
30°C for 35 min. No solids.
25°C for 35 min. No solids.
20°C for 35 min. No solids.
15°C for 35 min. No solids.
10°C for 35 min. No solids.
5°C for 35 min. No solids.

REW:eyw

cc: JS Buckingham
WR Christensen
RM Ginestet
KE Nelson
JC Womack

TCRC-2

Atlantic Richfield Hanford Company

WHC-SD-WM-ER-311, Rev. 0

Date: October 27, 1975

To: R. L. Walser

From: R. E. Wheeler, 2-2449 *R. E. Wheeler*

Subject: ANALYSIS OF TANK FARM SAMPLES
Sample: T-3635 Tank: 103-BX *△*
Received: April 14, 1975

Vis-OTR: Light brown - amber No solids 800 mrad/hr

pH: 12.0

OH: 0.264 M

SpG: 1.1383

Al: 2.38×10^{-2} M

Na: 2.02 M

NO₂: 0.582 M

NO₃: 0.504 M

Pu: 4.62×10^{-4} g/gal

D.T.A.: No exotherm below 200°C

SO₄: Cancelled

PO₄: 1.14×10^{-2} M

F: 7.02×10^{-3} M

CO₃: 0.407 M

GEA: ¹³⁴Cs - 8.61×10^2 μCi/gal
¹³⁹Cs - 2.19×10^5 μCi/gal
¹⁰⁶RuRh - 1.62×10^5 μCi/gal
¹⁵⁴Eu - 1.01×10^3 μCi/gal —

Water: 92.69%

TCRC-2

Atlantic Richfield Company

Date: February 28, 1974
To: R. L. Walser
From: W. H. Sant *W. H. Sant*
Subject: 242-S FEED SAMPLES T-2045 104-BX

Vis-OTR: Yellow, No solids 200 mr/hr.

pH: 11.01

SpG: 1.1325

DTA: No Exotherm

Pu: 1.33×10^{-4} g/l

Na: 1.64^M

SO₄: 0.175^M

Al: 2.57×10^{-3M}

NO₂: 0.754^M

F: 5.82×10^{-3M}

CO₃: 0.334^M

OH: 0.384^M

GEA: $^{134}\text{Cs} - 83.64 \mu\text{Ci/l}$
 $^{137}\text{Cs} - 1.63 \times 10^4 \mu\text{Ci/l}$
 $^{106}\text{RuRh} - 4.82 \times 10^4 \mu\text{Ci/l}$

NO₃: 0.206^M

PO₄: 1.47×10^{-2M}

H₂O: 89.03%

Cooling Curve: 5°C for 60 min. No solids.
10°C for 45 min. No solids.

cc: WR Christensen
GW Reddick, Jr. *GW Reddick, Jr.*
WH Sant

Atlantic Richfield Hanford Company

Date: January 10, 1975

To: R. L. Walser

From: R. E. Wheeler *RE Wheeler*Subject: ANALYSIS OF TANK FARM SAMPLES ~~4~~
SAMPLE: T-9245 104-BX Received 10/29/74

Vis-OTR: Yellow. No solids. 1.7 Rad/hr

pH: >12.7

SpG: 1.121

OH: 4.78×10^{-2} MAl: 1.0×10^{-2} M

Na: 13.5 M

NO₂: 0.843 MNO₃: 0.243 MPu: 2.68×10^{-4} gm/gal

DTA: No exotherm

SO₄: Cancelled by R. L. WalserPO₄: 1.46×10^{-2} MF: 5.20×10^{-3} MCO₃: 0.588 MGEA: ¹³⁴Cs - 1.70×10^3 μ Ci/gal
¹³⁷Cs - 1.99×10^5 μ Ci/gal
¹⁰⁶Ru Rh - 1.61×10^5 μ Ci/gal^{89,90}Sr: 72.75 μ Ci/gal

Water: 86.53%

Cooling Curve: 25°C for 45 min. No solids.
20°C for 60 min. No solids.
15°C for 45 min. No solids.
10°C for 45 min. No solids.
5°C for 45 min. No solids.

REW:jd

cc: JS Buckingham
WR Christensen
RM Ginestet
RE Wheeler
JC Womack

Atlantic Richfield Hanford Company

Date: May 20, 1975
To: R. L. Walser
From: R. E. Wheeler *R. E. Wheeler*
Subject: ANALYSIS OF TANK FARM SAMPLES
Sample: T-365 104-BX
Received December 6, 1974

Vis-OTR: Yellow, no solids 1 rad/hr
pH: 12.8
SpG: 1.1286
OH: 0.718 M
Al: 1.10×10^{-2} M
Na: 2.80 M
NO₂: 0.757 M
NO₃: 0.219 M
Pu: 2.66×10^{-4} g/gal
D.T.A.: No Exotherm below 200° C
So₄: Sample Slurped
Po₄: 3.07×10^{-2} M
F: 4.95×10^{-3} M
Co : 0.564 M
GEA: $^{134}\text{Cs} - 1.70 \times 10^3 \mu\text{Ci/gal}$
 $^{137}\text{Cs} - 1.98 \times 10^5 \mu\text{Ci/gal}$
 $^{106}\text{RuRh} - 1.43 \times 10^5 \mu\text{Ci/gal}$
Water: 85.95%

Atlantic Richfield Hanford Company

R. L. Walser
Page 2
May 20, 1975

Cooling Curve: 20°C for 60 min. No solids
15°C for 45 min. No solids
10°C for 75 min. No solids
5°C for 45 min. No solids

REW:eyw

cc: JS Buckingham
MR Christensen
GM Ginestet
JC Womack
RE Wheeler

Atlantic Richfield Hanford Company

Date: October 21, 1975

To: R. L. Walser

From: R. E. Wheeler, 2-2449 *R Wheeler*

Subject: ANALYSIS OF TANK FARM SAMPLES

Sample: T-6110 Tank: 104-BX *✓*

Received: July 15, 1975

Vis-OTR: Dark yellow No solids 400 mrad/hr

pH: 12.2

SpG: 1.1471

OH: 0.217 MAl: 7.27×10^{-3} MNa: 2.81 MNO₂: 1.02 MNO₃: 0.592 MPu: 5.05×10^{-4} g/gal

D.T.A.: No exotherm below 200°C

SO₄: CancelledPO₄: 1.55×10^{-2} MCl: 9.12×10^{-3} MF: 3.18×10^{-3} MCO₃: 0.598 MGEA: ¹⁰⁶RuRh - 1.58×10^5 μ Ci/gal¹²⁵Sb - 1.06×10^3 μ Ci/gal¹³⁴Cs - 1.26×10^3 μ Ci/gal¹³⁷Cs - 1.42×10^5 μ Ci/gal^{89,90}Sr: 7.44×10^3 μ Ci/gal

Atlantic Richfield Hanford Company

R. L. Walser
Page 2
October 21, 1975

Water: 84.20%

Cooling Curve: 25°C for 45 min. No solids.
20°C for 65 min. No solids.
15°C for 40 min. No solids.
10°C for 40 min. No solids.
5°C for 40 min. No solids.

REW:eyw

cc: JS Buckingham
WR Christensen
RM Ginestet
RE Wheeler
JC Womack

TCRC-6

EX 1.

WHC-SD-WM-ER-311, Rev. 0

Atlantic Richfield Hanford Company

Date: October 21, 1975

To: R. L. Walser

From: R. E. Wheeler, 2-2449 *R. E. Wheeler*

Subject: ANALYSIS OF TANK FARM SAMPLES

Sample: T-7088 Tank: 104-BX */*

Received: August 15, 1975

Vis-OTR: Clear yellow No solids 250 mrad/hr

pH: 10.3

SpG: 1.1285

OH: $< 5 \times 10^{-3} \text{ M}$

Al: $1.82 \times 10^{-3} \text{ M}$

Na: 2.99 M

NO₂: 0.765 M

NO₃: 0.504 M

Ru: $6.43 \times 10^{-4} \text{ g/gal}$

D.T.A.: No exotherm below 200°C

SO₄: Cancelled

PO₄: $8.81 \times 10^{-3} \text{ M}$

Cl: $1.13 \times 10^{-2} \text{ M}$

F: $5.78 \times 10^{-3} \text{ M}$

CO₃: 0.577 M

GEA: ¹⁰⁶RuRh - $1.84 \times 10^5 \text{ } \mu\text{Ci/gal}$

¹³⁴Cs - $1.12 \times 10^3 \text{ } \mu\text{Ci/gal}$

¹³⁷Cs - $1.23 \times 10^5 \text{ } \mu\text{Ci/gal}$

^{89,90}Sr: $1.55 \times 10^4 \text{ } \mu\text{Ci/gal}$

Water: 83.22%

Atlantic Richfield Hanford Company

R. L. Walser
Page 2
October 21, 1975

Cooling Curve: 35°C for 45 min. No solids.
30°C for 45 min. No solids.
25°C for 45 min. No solids.
20°C for 45 min. No solids.
15°C for 45 min. No solids.
10°C for 45 min. No solids.
5°C for 45 min. No solids.

REW:eyw

cc: JS Buckingham
WR Christensen
RM Ginestet
RE Wheeler
JC Womack

TCRC-7

Bx

Atlantic Richfield Hanford Company

Date: February 12, 1976

To: R. L. Walser

From: R. E. Wheeler, 2-2449 *R. E. Wheeler*Subject: ANALYSIS OF TANK FARM SAMPLES
Sample: T-9511 Tank: 104-BX
Received: November 5, 1975

Vis-OTR: Yellow No solids 180 mrad/hr

pH: 11.8

SpG: 1.087

OH: $< 9.5 \times 10^{-3} \text{ M}$ Al: $8.15 \times 10^{-4} \text{ M}$ Na: 1.88 MNO₂: 0.708 MNO₃: 0.242 MPu: $4.16 \times 10^{-4} \text{ gm/gal}$

D.T.A.: No exotherm below 200°C

PO₄: $9.28 \times 10^{-3} \text{ M}$ Cl: $1.33 \times 10^{-2} \text{ M}$ F: $5.0 \times 10^{-3} \text{ M}$ CO₃: 0.548 MGEA: ¹³⁴Cs - $4.48 \times 10^2 \text{ } \mu\text{Ci/gal}$ ¹³⁷Cs - $9.20 \times 10^4 \text{ } \mu\text{Ci/gal}$ ¹⁰⁶RuRh - $1.44 \times 10^5 \text{ } \mu\text{Ci/gal}$ ^{89, 90}Sr: $8.38 \times 10^3 \text{ } \mu\text{Ci/gal}$

Water: 87.97%

Atlantic Richfield Hanford Company

R: L. Walser
Page 2
February 12, 1976

Cooling Curve: 20°C for 35 min. No solids.
15°C for 35 min. No solids.
10°C for 35 min. No solids.
5°C for 35 min. No solids.

REW:eyw

cc: JS Buckingham
WR Christensen
KJ Gaylord
RM Ginestet
KE Nelson
JC Womack

ORIGINAL

SUPPORTING DOCUMENT		Number	Rev No.	Page A of Total Pages																																																									
Document Title: Data Transmittal Package for 241-BX-104 Waste Tank Characterization		SD- RE-TI-206	0	27 Total Pages																																																									
Key Words: Waste tank characterization, single-shell tank, 241-BX-104 waste tank, tank sampling, radio- active waste, nonradioactive waste analysis		Program Waste Management																																																											
THIS DOCUMENT IS FOR USE IN PERFORMANCE OF WORK UNDER CON- TRACTS WITH THE U.S. DEPARTMENT OF ENERGY BY PERSONS OR FOR PURPOSES WITHIN THE SCOPE OF THESE CONTRACTS. DISSEMINATION OF ITS CONTENTS FOR ANY OTHER USE OR PURPOSE IS EXPRESSLY FORBIDDEN.		Prepared by (Name, Dept. No. and Signature) R. L. Weiss <i>R. L. Weiss</i> K. E. Schull <i>K. E. Schull</i> 12221 12221 See reverse side for additional approvals																																																											
Abstract This document contains information relating to the sampling of wastes contained in the single-shell tank 241-BX-104 in fiscal year 1986. Observations and data taken during sampling, sample breakdown and preparation, and the results of analytical determinations are recorded.		<table border="1"> <thead> <tr> <th>* Distribution</th> <th>Name</th> <th>Mail Address</th> </tr> </thead> <tbody> <tr><td></td><td>M. R. Adams</td><td>R2-78</td></tr> <tr><td>*</td><td>F. E. Boyd</td><td>S5-04</td></tr> <tr><td>*</td><td>D. R. Bretzel</td><td>T6-50</td></tr> <tr><td></td><td>L. C. Brown</td><td>R1-48</td></tr> <tr><td>*</td><td>A. J. DiLiberto</td><td>R2-11</td></tr> <tr><td></td><td>D. A. Dodd</td><td>T6-50</td></tr> <tr><td>*</td><td>D. W. Fukumoto</td><td>R1-51</td></tr> <tr><td>*</td><td>S. A. Jones</td><td>T6-12</td></tr> <tr><td>*</td><td>F. M. Jungfleisch</td><td>R2-84</td></tr> <tr><td></td><td>D. W. Lindsey</td><td>R1-51</td></tr> <tr><td>*</td><td>K. W. Owens</td><td>R1-10</td></tr> <tr><td>*</td><td>K. E. Schull (2)</td><td>T6-50</td></tr> <tr><td>*</td><td>W. W. Scholz</td><td>R2-23</td></tr> <tr><td></td><td>J. P. Slaughter</td><td>T6-18</td></tr> <tr><td>*</td><td>J. E. Van Beek</td><td>R1-48</td></tr> <tr><td>*</td><td>R. L. Weiss (3)</td><td>T6-50</td></tr> <tr><td></td><td>R. D. Wojtasek</td><td>R1-10</td></tr> <tr><td></td><td>J. C. Womack</td><td>R2-18</td></tr> </tbody> </table>			* Distribution	Name	Mail Address		M. R. Adams	R2-78	*	F. E. Boyd	S5-04	*	D. R. Bretzel	T6-50		L. C. Brown	R1-48	*	A. J. DiLiberto	R2-11		D. A. Dodd	T6-50	*	D. W. Fukumoto	R1-51	*	S. A. Jones	T6-12	*	F. M. Jungfleisch	R2-84		D. W. Lindsey	R1-51	*	K. W. Owens	R1-10	*	K. E. Schull (2)	T6-50	*	W. W. Scholz	R2-23		J. P. Slaughter	T6-18	*	J. E. Van Beek	R1-48	*	R. L. Weiss (3)	T6-50		R. D. Wojtasek	R1-10		J. C. Womack	R2-18
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APPROVED FOR ^{KMB} _{6/1/93} PUBLIC RELEASE		(Continued on reverse side) *COMPLETE DOCUMENT (No asterisk, title page/summary of revision page only)																																																											
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Page 8	Number SD- RE-TI-206	Rev. No. 0	SUPPORTING DOCUMENT

Approvals ☐ _____ ☐ Program Office ☐ _____ ☐ Chemical Processing ☐ _____ ☐ Defense Waste Management and Decontamination and Decommissioning ☐ _____ ☐ Research and Engineering ☐ _____ ☐ Safety and Quality Assurance ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☒ <u>D.R. Bratzel</u> Author's Manager if Other than Approval Authority D. R. Bratzel ☒ <u>J. P. Slougher</u> Approval Authority J. P. Slougher	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 10%; text-align: center;">Distribution</th> <th style="width: 40%; text-align: center;">Name</th> <th style="width: 50%; text-align: center;">Mail Address</th> </tr> <tr> <td style="height: 400px;"></td> <td></td> <td></td> </tr> </table>	Distribution	Name	Mail Address			
Distribution	Name	Mail Address					

Summary of Revision Complete Revision ☐ Page Change ☐ Editorial Corrections ☐		
<u>DESCRIPTION OF CHANGE</u>		

SD-RE-TI-206
Rev. 0

I. INTRODUCTION

The following report contains information and data gathered from the characterization effort for the wastes contained in tank 241-BX-104. Its purpose is to compile in a standardized format all pertinent information to allow future retrieval and comparisons with other tanks similarly sampled. The report roughly follows the order in which information was originally obtained: sample recovery from the tank, breakdown, preparation for analysis, and analytical results. No attempts to interpret results or reach conclusions are made in this report. Additional information regarding specific portions of the characterization effort can be found in the following:

- Definition of program scope - Reference 2
- Tank sampling operations - Reference 1
- Sample ID nomenclature - Reference 3
- Sampler breakdown - Reference 3
- Segment and core compositing - Reference 3
- Analytical sample preparation - Reference 3
- Specific analysis requested - References 1 and 3
- Analytical procedures - Reference 3
- Analytical result report spreadsheet - Reference 4
- Analysis quality assurance - Reference 5

Every effort has been taken to ensure that all pertinent information has been included in this report.

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VI. ANALYTICAL SAMPLE PREPARATION DATA

The actual weights and volumes generated during analytical sample preparation (solution leaching) for the core composites from tank 241-BX-104 are shown. Peptization of the solid may occur in some of the water leaches (third contact). This forms an unseparable solid-liquid suspension broken by adding concentrated HCl to the leach to bring the acid concentration to 5M. In these cases, effectively no third water leach occurred and the acidified solution becomes the first acid leach.

No analytical sample preparation was required, except filtering, for the drainable liquor core composites.

Composite ID #71XC00XX

Initial weight of sample	5.729 g
Volume	3.1 mL

Residual weight:

- Water leach -- 5.408 g^P
- Acid leach -- 4.698 g^I
- HNO₃-HF-HCl dissolution -- 0.919 g.

Final solution volume:

- Water leach -- 30 mL
  - Acid leach -- 25 mL
  - HNO₃-HF-HCl dissolution -- 25 mL.
- 2.8 mL of acid leach combined with 25 mL of HNO₃-HF-HCl dissolution and submitted for analysis.

^P Sample peptized on third water leach -- concentrated HCl becoming first acid leach.

^I 0.525 g carried on to dissolution step.

SD-RE-TI-206
Rev. 0Composite ID #72XC00XX

Initial weight of sample 6.691 g
Volume 4.0 mL

Residual weight:

- Water leach -- 6.150 g^P
- Acid leach -- 5.423 g^m
- HNO₃-HF-HCl dissolution -- 0.640 g.

Final solution volume:

- Water leach -- 35 mL
  - Acid leach -- 25 mL
  - HNO₃-HF-HCl dissolution -- 25 mL.
- 2.275 mL of acid leach combined with 25 mL of HNO₃-HF-HCl dissolution and submitted for analysis.

P Sample peptized on third water leach -- concentrated HCl becoming first acid leach.

^m 0.494 g carried on to dissolution step.

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Rev. 0

VII. ANALYTICAL RESULTS

A spreadsheet program on a dedicated microcomputer is used to convert raw analytical data to concentration values for the components in the water. The following are copies of the spreadsheet printouts for the core composite samples from tank 241-BX-104. For the solid phase core composites, concentration values from the individual leaching solutions (water, HCl-HNO₃-HF pressure dissolution) are reported along with overall results. Two overall results are reported: REPORT TOTAL - sum of all values reported greater than the limit of confirmation ("less than values" not summed) and MAXIMUM TOTAL - sum of all values reported with limit of confirmation values taken as actual value (worst case).

Physical data determined are shown on the spreadsheet reports.

BX
104.8SD-RE-TI-206
Rev. 0

05-Jan-88

BX-104
R-1
71XCXXX
CORE COMPOSITE

COMPONENT	REPORT UNIT	REPORT VALUE: Direct	REPORT VALUE: Water	REPORT VALUE: Acid	REPORT VALUE: Fusion	REPORT TOTAL	MAXIMUM TOTAL
Density	g/mL						
Aluminum	ug/g		1.14E+03	0.00E+00	3.98E+04	4.08E+04	4.08E+04
Barium	ug/g		6.34E-01	0.00E+00	1.20E+03	1.21E+03	1.21E+03
Bismuth	ug/g	<	1.15E+01	0.00E+00	1.67E+03	1.69E+03	1.71E+03
Boron	ug/g		5.71E+00	0.00E+00	9.36E+04	9.36E+04	9.36E+04
Cadmium	ug/g	<	2.62E+00	0.00E+00	2.17E+01	0.00E+00	2.43E+01
Calcium	ug/g		4.43E+01	0.00E+00	3.84E+03	3.88E+03	3.88E+03
Chromium	ug/g		7.63E+02	0.00E+00	2.33E+03	3.09E+03	3.09E+03
Cobalt	ug/g		0.00E+00	0.00E+00	1.51E+01	1.51E+01	1.51E+01
Copper	ug/g		1.45E+01	0.00E+00	1.05E+02	1.19E+02	1.19E+02
Iron	ug/g		1.07E+00	0.00E+00	9.62E+03	9.62E+03	9.62E+03
Lead	ug/g	<	8.46E+00	0.00E+00	5.42E+02	5.42E+02	5.50E+02
Magnesium	ug/g		3.56E-01	0.00E+00	1.90E+03	1.90E+03	1.90E+03
Manganese	ug/g	<	2.07E+01	0.00E+00	8.10E+02	8.10E+02	8.31E+02
Nickel	ug/g		1.42E+01	0.00E+00	1.81E+02	1.93E+02	1.93E+02
Phosphorus	ug/g		3.87E+03	0.00E+00	6.11E+02	4.50E+03	4.50E+03
Potassium	ug/g		4.92E+02	0.00E+00	4.64E+02	9.55E+02	9.55E+02
Silicon	ug/g		1.35E+02	0.00E+00	2.57E+04	2.57E+04	2.57E+04
Silver	ug/g	<	1.05E+00	0.00E+00	1.07E+02	1.07E+02	1.08E+02
Sodium	ug/g		5.37E+04	0.00E+00	1.59E+04	6.96E+04	6.96E+04
Strontium	ug/g		0.00E+00	0.00E+00	7.71E+01	7.71E+01	7.71E+01
Zinc	ug/g		0.00E+00	0.00E+00	1.21E+02	1.21E+02	1.21E+02
Zirconium	ug/g	<	4.82E+00	0.00E+00	1.13E+03	1.13E+03	1.14E+03
Uranium	ug/g		3.80E+00	0.00E+00	3.48E+04	3.48E+04	3.48E+04
Nitrate	ug/g		4.19E+04			4.19E+04	4.19E+04
TUC	ug/g		1.78E+03			1.78E+03	1.78E+03
pH	log(I/N)	1.10E+01					
Mass Loss							
Room to 400 C	ug/g	4.19E+05				4.19E+05	4.19E+05
400 to 1000 C	ug/g	6.44E+04				6.44E+04	6.44E+04
Pu-239,40	uCi/g		2.12E-03	0.00E+00	3.37E-01	3.41E-01	3.41E-01
C-14	uCi/g		6.28E-04	0.00E+00		6.28E-04	6.28E-04
Sr-90	uCi/g		1.97E-01	0.00E+00	3.75E+02	3.75E+02	3.75E+02
Tc-99	uCi/g		3.35E-02	0.00E+00	0.00E+00	3.35E-02	3.35E-02
Am-241	uCi/g	<	2.05E-03	0.00E+00	2.25E-01	0.00E+00	2.27E-01
Co-60	uCi/g		1.50E-02	0.00E+00	6.23E-02	7.70E-02	7.70E-02
Cs-137	uCi/g		5.92E+01	0.00E+00	1.59E+01	7.51E+01	7.51E+01
I-129	uCi/g	5.20E-05				5.21E-05	5.20E-05
Total Gamma	uCi/g		6.07E+01	0.00E+00	2.54E+01	8.62E+01	8.62E+01
Visual		NOTE 1:	NOTE 2:	NOTE 3:	NOTE 4:		
Volume (total)	mL	0.00E+00				0.00E+00	0.00E+00
Mass (total)	g	6.19E+01				6.19E+01	6.19E+01
Tank Volume	gal	8.60E+04					
Radiation	mR/h	2.50E+02	8.00E+00	0.00E+00	7.20E+01	2.50E+02	2.50E+02
Specific Heat	J/g deg C	NONE				NONE	NONE
Softening Point	deg C	NONE				NONE	NONE
Bulk Density	g/mL	1.35E+00				1.35E+00	1.35E+00
Particle Size	um	NOTE 5:					
Viscosity		too solid					

NOTE 1: BROWN
total ug/g 1.04E+05
total uCi/g 1.20E+02

NOTE 2: CLEAR BRIGHT YELLOW

NOTE 3: NONE

NOTE 4: CLEAR YELLOW/GREEN

NOTE 5: 10 um mean population
14.2 um at 50% of total by volume

total ug/g 2.34E+05
total uCi/g 4.17E+02

SD-RE-TI-206

Rev. 0

05-Jan-88

BL-104
R-3
72XCIIXX
CORE COMPOSITE

COMPONENT	REPORT UNIT	REPORT VALUE! Direct	REPORT VALUE! Water	REPORT VALUE! Acid	REPORT VALUE! Fusion	REPORT TOTAL	MAXIMUM TOTAL
Density	g/mL						
Aluminum	ug/g		1.25E+03	0.00E+00	5.28E+04	5.40E+04	5.40E+04
Barium	ug/g		1.33E+00	0.00E+00	2.07E+03	2.07E+03	2.07E+03
Bismuth	ug/g	<	1.15E+01	0.00E+00	1.09E+03	1.09E+03	1.10E+03
Boron	ug/g		5.65E+00	0.00E+00	0.00E+00	5.65E+00	5.65E+00
Cadmium	ug/g	<	2.62E+00	0.00E+00	2.24E+01	0.00E+00	2.50E+01
Calcium	ug/g		7.58E+01	0.00E+00	5.73E+03	5.80E+03	5.80E+03
Chromium	ug/g		4.21E+02	0.00E+00	4.06E+03	4.48E+03	4.48E+03
Cobalt	ug/g		0.00E+00	0.00E+00	8.41E+00	8.41E+00	8.41E+00
Copper	ug/g		1.49E+00	0.00E+00	7.02E+01	7.17E+01	7.17E+01
Iron	ug/g		1.24E+00	0.00E+00	5.06E+03	5.06E+03	5.06E+03
Lead	ug/g	<	1.24E+01	0.00E+00	5.82E+02	5.82E+02	5.84E+02
Magnesium	ug/g		1.69E+00	0.00E+00	3.04E+03	3.04E+03	3.04E+03
Manganese	ug/g	<	2.09E+01	0.00E+00	1.11E+03	1.11E+03	1.13E+03
Nickel	ug/g		1.94E+01	0.00E+00	9.57E+01	1.15E+02	1.15E+02
Phosphorus	ug/g		2.50E+03	0.00E+00	5.10E+02	3.01E+03	3.01E+03
Potassium	ug/g		5.11E+02	0.00E+00	6.44E+02	1.16E+03	1.16E+03
Silicon	ug/g		1.27E+02	0.00E+00	3.88E+04	3.99E+04	3.99E+04
Silver	ug/g	<	1.05E+00	0.00E+00	6.98E+01	6.98E+01	7.08E+01
Sodium	ug/g		4.46E+04	0.00E+00	2.29E+04	6.75E+04	6.75E+04
Strontium	ug/g		1.12E+01	0.00E+00	4.65E+01	4.65E+01	4.66E+01
Zinc	ug/g		0.00E+00	0.00E+00	1.02E+02	1.02E+02	1.02E+02
Zirconium	ug/g	<	4.81E+00	0.00E+00	1.36E+03	1.36E+03	1.37E+03
Uranium	ug/g		2.83E+00	0.00E+00	1.40E+04	1.40E+04	1.40E+04
Nitrate	ug/g		3.50E+04			3.50E+04	3.50E+04
TOC	ug/g		2.71E+03			2.71E+03	2.71E+03
pH	log(1/M)	1.10E+01					
Mass Loss							
Room to 400 C	ug/g	4.56E+05				4.56E+05	4.56E+05
400 to 1000 C	ug/g	5.77E+04				5.77E+04	5.77E+04
Pu-239,40	uCi/g		1.33E-03	0.00E+00	3.89E-01	3.91E-01	3.91E-01
C-14	uCi/g	<	3.53E-04	0.00E+00		0.00E+00	3.53E-04
Sr-90	uCi/g		3.62E-01	0.00E+00	1.54E+02	1.54E+02	1.54E+02
Tc-99	uCi/g		3.23E-02	0.00E+00	0.00E+00	3.23E-02	3.23E-02
Am-241	uCi/g		5.75E-03	0.00E+00	1.03E+00	0.00E+00	1.03E+00
Co-60	uCi/g		2.84E-02	0.00E+00	3.17E-02	0.00E+00	5.00E-02
Cs-137	uCi/g		6.43E+01	0.00E+00	5.95E+01	1.24E+02	1.24E+02
I-129	uCi/g	<	3.50E-05			0.00E+00	3.50E-05
Total Gamma	uCi/g		6.64E+01	0.00E+00	8.01E+01	1.47E+02	1.47E+02
Visual		NOTE 1:	NOTE 2:	NOTE 3:	NOTE 4:		
Volume (total)	mL	0.00E+00				0.00E+00	0.00E+00
Mass (total)	g	5.49E+01				5.49E+01	5.49E+01
Tank Volume	gal	8.50E+04					
Radiation	mr/h	2.50E+02	9.00E+00	0.00E+00	7.20E+01	2.50E+02	2.50E+02
Specific Heat	J/g deg C	NON-DET				NON-DET	NON-DET
Softening Point	deg C	NON-DET				NON-DET	NON-DET
Bulk Density	g/mL	1.76E+00				1.76E+00	1.76E+00
Particle Size	um	NOTE 5:					
Viscosity		too solid					

NOTE 1: BROWN WITH SMALL HARD CHUNKS
 NOTE 2: CL BRT YELLOW
 NOTE 3: NONE
 NOTE 4: CL LT GR
 NOTE 5: 30.9 um mean population
 116.7 um at 50% of total by volume

TC 2C-2

WHC-SD-WM-ER-311, Rev. 0

✓✓

Date: February 28, 1974

To: R. L. Walser

From: W. H. Sant *W. H. Sant*

Subject: 242-S FEED SAMPLES T-2046 105-8X

Vis-OTR: Yellow No solids 500 mr/hr.

pH: 10.8

SpG: 1.0956

DTA: No Exotherm

Pu: 7.72×10^{-5} g/lNa: 2.21^M SO₄: 0.136^M Al: 6.91×10^{-3M} NO₂: 0.477^M F: 1.04×10^{-2M} CO₃: 0.394^M OH: 0.504^M

GEA: $^{134}\text{Cs} - 5.16 \times 10^2 \mu\text{Ci/l}$
 $^{137}\text{Cs} - 6.75 \times 10^4 \mu\text{Ci/l}$
 $^{106}\text{RuRh} - 9.22 \times 10^4 \mu\text{Ci/l}$

NO₃: 0.230^M PO₄: 1.22×10^{-2M} H₂O: 86.02%

Cooling Curve: 10°C for 45 Min. No solids
5°C for 60 Min. No solids.

cc: WR Christensen
GW Reddick, Jr.
WH Sant

TCRC-3

Atlantic Richfield Hanford Company

BX 1/2

WHC-SD-WM-ER-311, Rev. 0

Date: October 27, 1975
To: R. L. Walser
From: R. E. Wheeler, 2-2449 *R. E. Wheeler*
Subject: ANALYSIS OF TANK FARM SAMPLES
Sample: T-1437 Tank: 105-BX ✓
Received: January 14, 1975

Vis-OTR: Clear Yellow No solids 1000 mrad/hr

pH: 11.1

SpG: 1.2034

OH: $< 1.89 \times 10^{-2} \text{ M}$

Al: $5.53 \times 10^{-3} \text{ M}$

Na: 3.42 M

NO₂: 1.29 M

NO₃: 1.20 M

Pu: $2.07 \times 10^{-4} \text{ g/gal}$

D.T.A.: No exotherm below 200°C

SO₄: Cancelled

PO₄: $5.19 \times 10^{-2} \text{ M}$

F: $2.46 \times 10^{-2} \text{ M}$

CO₃: 0.462 M

GEA: ¹³⁷Cs - $1.50 \times 10^5 \text{ } \mu\text{Ci/gal}$

^{89,90}Sr: $3.50 \times 10^2 \text{ } \mu\text{Ci/gal}$

Water: 79.70%

R.L. Walser

Page 2

October 27, 1975

Cooling Curve: 25°C for 60 min. No solids.
20°C for 60 min. No solids.
15°C for 60 min. No solids.
10°C for 45 min. No solids.
5°C for 60 min. No solids.

REW:ewy

cc: JS Buckingham
WR Christensen
RM Ginestet
RE Wheeler
JC Womack

Date: November 26, 1975

To: R. L. Walser

From: R. E. Wheeler, 2-2449 *R. E. Wheeler*

Subject: ANALYSIS OF TANK FARM SAMPLES
 Sample: T-8924 Tank: 105-BX *A*
 Received: October 16, 1975

Vis-OTR: Yellow No solids 1 rad on contact

pH: 12.4

SpG: 1.176

OH: 0.982 M

Al: 0.135 M

Na: 3.95 M

NO₂: 1.77 M

NO₃: 1.47 M

Pu: 8.33×10^{-5} gm/gal

SO₄: Cancelled

D.T.A.: No exotherms

^{89,90}Sr: 13.47 μ Ci/gal

PO₄: 5.84×10^{-2} M

Cl: 3.87×10^{-2} M

F: 1.62×10^{-4} M

CO₃: 0.447 M

GEA: ¹³⁴Cs - 1.22×10^2 μ Ci/gal
¹³⁷Cs - 6.54×10^5 μ Ci/gal

Water: 76.88%

Cooling Curve: 35°C for 35 min. No solids.

R. L. Walser
November 26, 1975
Page 2

Cooling Curve: 30°C for 35 min. No solids.
25°C for 35 min. No solids.
20°C for 35 min. No solids.
15°C for 35 min. No solids.
10°C for 35 min. No solids.
5°C for 35 min. No solids.

REW:eyw

cc: JS Buckingham
WR Christensen
RM Ginestet
RE Wheeler
JC Womack

Tc 2C - 5

Date: 3-16-76

To: R. L. WALSER

From: *R. L. Walser*

Subject: ANALYSIS OF TANK FARM SAMPLES

SAMPLE NO. T 2325

TANK: 105-BX

RECEIVED: 2-11-76

VIS-OTR: DARK Yellow, No solids, 800 m Rads/hr

PH	12.6
SpG	1.369
% Water	56.38
OH	2.11 M
NO ₃	2.51 M
NO ₂	1.24 M
CO ₂	0.251 M
Fe	1.6 x 10 ⁻² M
SO ₄	5.5 x 10 ⁻² M
Cl	9.6 x 10 ⁻² M
F	4.4 x 10 ⁻³ M
Hg	1.6 x 10 ⁻³ M
Al	1.12 M
Na	2.83 M
Cu	4.6 x 10 ⁻⁵ M
Pb	3.14 x 10 ⁻⁴ M

Pu 1.74 x 10⁻⁵ g/gal

GEA: 1.37CS 1.09 x 10⁻⁵ g/gal
 1.37CS 1.09 x 10⁻⁵ g/gal
 1.37CS 1.09 x 10⁻⁵ g/gal
 1.37CS 1.09 x 10⁻⁵ g/gal
 1.37CS 1.09 x 10⁻⁵ g/gal
 1.37CS 1.09 x 10⁻⁵ g/gal

Cooling Curve: 35° for 35 minutes No Solids
 30° for 35 minutes
 25° for 35 minutes
 20° for 35 minutes
 15° for 35 minutes
 10° for 35 minutes
 5° for 35 minutes

DIA: No Exotherm below 200°C, Exotherm at 260°C

ORIGINAL

SUPPORTING DOCUMENT		Number	Rev No.	Page A of																																																									
Document Title: Data Transmittal Package for 241-BX-105 Waste Tank Characterization		SD- RE-TI-202	0	26 Total Pages																																																									
Key Words: Waste tank characterization, single-shell tank, 241-BX-105 waste tank, tank sampling, radio- active waste, nonradioactive waste analysis		Program: Waste Management																																																											
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		See reverse side for additional approvals																																																											
Abstract		<table border="1"> <thead> <tr> <th>Distribution</th> <th>Name</th> <th>Mail Address</th> </tr> </thead> <tbody> <tr><td>*</td><td>M. R. Adams</td><td>R2-78</td></tr> <tr><td>*</td><td>E. E. Boyd</td><td>S5-04</td></tr> <tr><td>*</td><td>D. R. Bratzel</td><td>T6-50</td></tr> <tr><td>*</td><td>L. C. Brown</td><td>R1-48</td></tr> <tr><td>*</td><td>A. J. DiLiberto</td><td>R2-11</td></tr> <tr><td>*</td><td>D. A. Dodd</td><td>T6-50</td></tr> <tr><td>*</td><td>D. W. Fukumoto</td><td>R1-51</td></tr> <tr><td>*</td><td>S. A. Jones</td><td>T6-12</td></tr> <tr><td>*</td><td>F. M. Jungfleisch</td><td>R2-84</td></tr> <tr><td>*</td><td>D. W. Lindsey</td><td>R1-51</td></tr> <tr><td>*</td><td>K. W. Owens</td><td>R1-10</td></tr> <tr><td>*</td><td>K. E. Schull (2)</td><td>T6-50</td></tr> <tr><td>*</td><td>W. W. Schulz</td><td>R2-23</td></tr> <tr><td>*</td><td>J. P. Slaughter</td><td>T6-18</td></tr> <tr><td>*</td><td>J. E. Van Beek</td><td>R1-48</td></tr> <tr><td>*</td><td>R. L. Weiss (3)</td><td>T6-50</td></tr> <tr><td>*</td><td>B. D. Wojtasek</td><td>R1-10</td></tr> <tr><td>*</td><td>J. C. Womack</td><td>R2-18</td></tr> </tbody> </table>			Distribution	Name	Mail Address	*	M. R. Adams	R2-78	*	E. E. Boyd	S5-04	*	D. R. Bratzel	T6-50	*	L. C. Brown	R1-48	*	A. J. DiLiberto	R2-11	*	D. A. Dodd	T6-50	*	D. W. Fukumoto	R1-51	*	S. A. Jones	T6-12	*	F. M. Jungfleisch	R2-84	*	D. W. Lindsey	R1-51	*	K. W. Owens	R1-10	*	K. E. Schull (2)	T6-50	*	W. W. Schulz	R2-23	*	J. P. Slaughter	T6-18	*	J. E. Van Beek	R1-48	*	R. L. Weiss (3)	T6-50	*	B. D. Wojtasek	R1-10	*	J. C. Womack	R2-18
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SD-RE-TI-202

Rev. 0

VI. ANALYTICAL SAMPLE PREPARATION DATA

The actual weights and volumes generated during analytical sample preparation (solution leaching) for the core composites from tank 24I-BX-105 are shown. Peptization of the solid may occur in some of the water leaches (third contact). This forms an unseparable solid-liquid suspension broken by adding concentrated HCl to the leach to bring the acid concentration to 5M. In these cases, effectively no third water leach occurred and the acidified solution becomes the first acid leach.

No analytical sample preparation was required, except filtering, for the drainable liquor core composites.

Composite ID #81XC00XX

Initial weight of sample	5.515 g
Volume	3.2 mL

Residual weight:

- Water leach -- 3.075 g^P
- Acid leach -- 2.120 g¹
- HNO₃-HF-HCl dissolution -- 0.26 g.

Final solution volume:

- Water leach -- 35 mL
  - Acid leach -- 25 mL
  - HNO₃-HF-HCl dissolution -- 30 mL.
- 6.075 mL of acid leach combined with 30 mL of HNO₃-HF-HCl dissolution and submitted for analysis.

P Sample peptized on third water leach -- concentrated HCl becoming first acid leach.

¹ 0.515 g carried on to dissolution step.

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Composite ID #82XC00XX

Initial weight of sample 5.357 g
Volume 3.0 mL

Residual weight:

- Water leach -- 4.755 g^P
- Acid leach -- 4.267 g^m
- HNO₃-HF-HCl dissolution -- 0.374 g.

Final solution volume:

- Water leach -- 35 mL
  - Acid leach -- 25 mL
  - HNO₃-HF-HCl dissolution -- 25 mL.
- 3.0 mL of acid leach combined with 25 mL of HNO₃-HF-HCl dissolution and submitted for analysis.

^P Sample peptized on third water leach -- concentrated HCl becoming first acid leach.

^m 0.512 g carried on to dissolution step.

SD-RE-TI-202
Rev. 0

VII. ANALYTICAL RESULTS

A spreadsheet program on a dedicated microcomputer is used to convert raw analytical data to concentration values for the components in the water. The following are copies of the spreadsheet printouts for the core composite samples from tank 241-BX-105. For the solid phase core composites, concentration values from the individual leaching solutions (water, HCl-HNO₃-HF pressure dissolution) are reported along with overall results. Two overall results are reported: REPORT TOTAL - sum of all values reported greater than the limit of confirmation ("less than values" not summed) and MAXIMUM TOTAL - sum of all values reported with limit of confirmation values taken as actual value (worst case).

Physical data determined are shown on the spreadsheet reports.

SD-RE-TI-202

Rev. 0

05-Jan-88

BT-105 R-4 810XXXX CORE COMPOSITE	COMPONENT	REPORT UNIT	REPORT VALUE Direct	REPORT VALUE Water	REPORT VALUE Acid	REPORT VALUE Fusion	REPORT TOTAL	MAXIMUM TOTAL
	Density	g/mL						
	Aluminum	ug/g		1.66E+03	0.00E+00	1.52E+04	1.68E+04	1.68E+04
	Barium	ug/g		2.15E+00	0.00E+00	2.44E+03	2.44E+03	2.44E+03
	Bismuth	ug/g		1.40E+01	0.00E+00	1.27E+03	1.27E+03	1.27E+03
	Boron	ug/g		6.09E+00	0.00E+00	0.00E+00	6.09E+00	6.09E+00
	Cadmium	ug/g		3.17E+00	0.00E+00	6.03E+01	6.33E+01	6.33E+01
	Calcium	ug/g		1.02E+02	0.00E+00	5.08E+03	5.18E+03	5.18E+03
	Chromium	ug/g		1.53E+02	0.00E+00	1.46E+04	1.47E+04	1.47E+04
	Cobalt	ug/g		1.14E+00	0.00E+00	0.00E+00	0.00E+00	1.14E+00
	Copper	ug/g		2.63E+00	0.00E+00	2.99E+01	3.25E+01	3.25E+01
	Iron	ug/g		2.53E+00	0.00E+00	9.50E+03	9.50E+03	9.50E+03
	Lead	ug/g		3.92E+01	0.00E+00	7.92E+02	8.31E+02	8.31E+02
	Magnesium	ug/g		2.77E+00	0.00E+00	2.51E+03	2.51E+03	2.51E+03
	Manganese	ug/g		2.54E+01	0.00E+00	2.54E+03	2.54E+03	2.54E+03
	Nickel	ug/g		3.20E+01	0.00E+00	1.88E+02	2.21E+02	2.21E+02
	Phosphorus	ug/g		2.36E+04	0.00E+00	8.43E+03	3.20E+04	3.20E+04
	Potassium	ug/g		8.49E+02	0.00E+00	5.78E+02	1.43E+03	1.43E+03
	Silicon	ug/g		9.79E+02	0.00E+00	3.23E+04	3.33E+04	3.33E+04
	Silver	ug/g		1.27E+00	0.00E+00	3.52E+01	3.52E+01	3.52E+01
	Sodium	ug/g		1.04E+05	0.00E+00	3.82E+04	1.42E+05	1.42E+05
	Strontium	ug/g		7.62E+01	0.00E+00	6.97E+01	7.05E+01	7.05E+01
	Zinc	ug/g		0.00E+00	0.00E+00	2.04E+02	2.04E+02	2.04E+02
	Zirconium	ug/g		5.84E+00	0.00E+00	4.86E+02	4.86E+02	4.92E+02
	Uranium	ug/g		3.14E+00	0.00E+00	6.60E+03	6.60E+03	6.60E+03
	Nitrate	ug/g		3.54E+04			3.54E+04	3.54E+04
	TOC	ug/g		3.76E+03			3.76E+03	3.76E+03
	pH	log(1/70)	1.20E+01					
	Mass Loss							
	Room to 400 C	ug/g	5.93E+05				5.93E+05	5.93E+05
	400 to 1000 C	ug/g	6.40E+04				6.40E+04	6.40E+04
	Pu-239,40	uCi/g		1.39E-02	0.00E+00	4.53E-01	4.74E-01	4.74E-01
	C-14	uCi/g		2.13E-03	0.00E+00		2.13E-03	2.13E-03
	Cr-50	uCi/g		2.53E+00	0.00E+00	2.24E+02	2.27E+02	2.27E+02
	Tc-99	uCi/g		3.63E-02	0.00E+00	0.00E+00	3.63E-02	3.63E-02
	Am-241	uCi/g		2.13E-02	0.00E+00	1.63E+00	0.00E+00	1.63E+00
	Co-60	uCi/g		4.99E-02	0.00E+00	2.03E-01	0.00E+00	2.03E-01
	Cs-137	uCi/g		4.90E+01	0.00E+00	1.33E+01	6.23E+01	6.23E+01
	I-129	uCi/g	3.70E-05				0.00E+00	3.70E-05
	Total Gamma	uCi/g		5.08E+01	0.00E+00	5.04E+01	1.01E+02	1.01E+02
	Visual		NOTE 1:	NOTE 2:	NOTE 3:	NOTE 4:		
	Volume (total)	uL	0.00E+00				0.00E+00	0.00E+00
	Mass (total)	g	1.05E+02				1.05E+02	1.05E+02
	Tank Volume	gal	5.50E+04					
	Radiation	mR/h	2.00E+02	6.00E+00	0.00E+00	7.20E+01	2.00E+02	2.00E+02
	Specific Heat	J/g deg C	NON-DET				NON-DET	NON-DET
	Softening Point	deg C	NON-DET				NON-DET	NON-DET
	Bulk Density	g/mL	1.53E+00				1.53E+00	1.53E+00
	Particle Size	um	NOTE 5:					
	Viscosity		too solid					

NOTE 1: DRK BR/GRIT
 NOTE 2: CL/LT YELLOW
 NOTE 3: NONE
 NOTE 4: CL/FIREST GR
 NOTE 5: 26.5 um mean population
 56.9 um at 50% of total by volume

SD-RE-TI-202
Rev. 0

05-Jan-88

SI-105 R-8 621001X CORE COMPOSITE	COMPONENT	REPORT UNIT	REPORT VALUE Direct	REPORT VALUE Water	REPORT VALUE Acid	REPORT VALUE Fusion	REPORT TOTAL	MAXIMUM TOTAL
	Density	g/mL						
	Aluminum	ug/g		1.20E+03	0.00E+00	4.97E+04	5.09E+04	5.09E+04
	Barium	ug/g		1.93E+00	0.00E+00	3.95E+03	3.95E+03	3.95E+03
	Bismuth	ug/g	<	1.44E+01	0.00E+00	2.54E+02	2.54E+02	2.56E+02
	Boron	ug/g		4.52E+00	0.00E+00	0.00E+00	4.52E+00	4.52E+00
	Cadmium	ug/g	<	3.27E+00	0.00E+00	2.18E+01	0.00E+00	2.50E+01
	Calcium	ug/g		7.33E+01	0.00E+00	7.19E+03	7.26E+03	7.26E+03
	Chromium	ug/g		1.45E+02	0.00E+00	2.57E+03	2.57E+03	2.57E+03
	Cobalt	ug/g		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Copper	ug/g		2.97E+00	0.00E+00	1.91E+01	2.20E+01	2.20E+01
	Iron	ug/g		1.34E+00	0.00E+00	2.07E+03	2.08E+03	2.08E+03
	Lead	ug/g		4.55E+01	0.00E+00	2.50E+02	2.94E+02	2.94E+02
	Magnesium	ug/g		5.17E+00	0.00E+00	3.89E+03	3.90E+03	3.90E+03
	Manganese	ug/g	<	2.61E+01	0.00E+00	3.98E+02	3.98E+02	4.22E+02
	Nickel	ug/g		2.03E+01	0.00E+00	5.36E+01	7.37E+01	7.37E+01
	Phosphorus	ug/g		7.18E+03	0.00E+00	6.66E+02	7.25E+03	7.25E+03
	Potassium	ug/g		7.72E+02	0.00E+00	7.33E+02	1.50E+03	1.50E+03
	Silicon	ug/g		4.55E+02	0.00E+00	4.92E+04	4.97E+04	4.97E+04
	Silver	ug/g	<	1.51E+00	0.00E+00	1.06E+01	1.06E+01	1.21E+01
	Sodium	ug/g		5.44E+04	0.00E+00	2.32E+04	7.76E+04	7.76E+04
	Strontium	ug/g		6.66E+01	0.00E+00	4.13E+01	4.13E+01	4.13E+01
	Zinc	ug/g		0.00E+00	0.00E+00	7.93E+01	7.93E+01	7.93E+01
	Zirconium	ug/g	<	6.01E+00	0.00E+00	1.72E+02	1.72E+02	1.78E+02
	Uranium	ug/g		2.04E+00	0.00E+00	2.21E+03	2.21E+03	2.21E+03
	Nitrate	ug/g		3.11E+04			3.11E+04	3.11E+04
	TUC	ug/g		1.30E+03			1.30E+03	1.30E+03
	pH	log(1/70)	> 1.20E+01					
	Mass Loss							
	Room to 400 C	ug/g	5.47E+05				5.47E+05	5.47E+05
	400 to 1000 C	ug/g	9.48E+04				9.48E+04	9.48E+04
	Pu-239, 40	uCi/g		3.25E+03	0.00E+00	3.15E+02	3.47E+02	3.47E+02
	C-14	uCi/g	<	4.45E+04	0.00E+00		0.00E+00	4.40E+04
	Sm-147	uCi/g		1.73E+00	0.00E+00	4.40E+01	4.57E+01	4.57E+01
	Eu-152	uCi/g		3.06E+02	0.00E+00	0.00E+00	3.06E+02	3.06E+02
	Am-241	uCi/g	<	3.37E+03	0.00E+00	3.33E+01	0.00E+00	3.36E+01
	Co-60	uCi/g		2.91E+02	0.00E+00	2.70E+02	0.00E+00	5.61E+02
	Cs-137	uCi/g		4.12E+01	0.00E+00	4.66E+00	4.59E+01	4.59E+01
	I-129	uCi/g	<	2.30E+05			0.00E+00	2.30E+05
	Total Gamma	uCi/g		4.19E+01	0.00E+00	1.03E+01	5.22E+01	5.22E+01
	Visual		NOTE 1:	NOTE 2:	NOTE 3:	NOTE 4:		
	Volume (total)	mL	0.60E+00				0.00E+00	0.00E+00
	Mass (total)	g	1.02E+02				1.02E+02	1.02E+02
	Tank Volume	gal	5.50E+04					
	Radiation	mR/h	4.00E+01	4.00E+00	0.00E+00	7.20E+01	4.00E+01	4.00E+01
	Specific Heat	J/g deg C	NON-DET				NON-DET	NON-DET
	Softening Point	deg C	NON-DET				NON-DET	NON-DET
	Bulk Density	g/mL	1.79E+00				1.79E+00	1.79E+00
	Particle Size	um	NOTE 5:					
	Viscosity		too solid					

NOTE 1: DL GR/BLM
total ug/g 9.74E+04
total uCi/g 8.52E+01

NOTE 2: DL/LT YELLOW

NOTE 3: NONE

NOTE 4: DL/LT GR

NOTE 5: 26.3 um mean population
52 um at 50% of total by volume

Atlantic Richfield Hanford Company

Date: April 12, 1974
To: R. L. Walser
From: R. E. Wheeler *RE Wheeler*
Subject: ANALYSIS OF TANK FARM SAMPLES
SAMPLE: T-3060 106-BX

VIS-OTR: Yellow, Clear No solids 150 mrads/hr

pH: 12.45

SpG: 1.2098

OH: 0.626 M

Al: 5.05×10^{-2} M

Na: 4.98 M

NO₂: 1.62 M

NO₃: 1.33 M

Pu: 9.86×10^{-6} g/l

DTA: No Exotherm

SO₄: 0.144 M

PO₄: 5.28×10^{-2} M

F: 9.02×10^{-3} M

CO₃: 0.461 M

GEA: $^{134}\text{Cs} - 1.29 \times 10^3 \mu\text{Ci/gal}$
 $^{137}\text{Cs} - 5.83 \times 10^5 \mu\text{Ci/gal}$

30% Reduction - 26.25

Solids - 0.678%

50% Reduction - 50.0

Solids - 2.75%

Water - 73.30%

Cooling Curve - 10°C for 45 min. No solids.
5°C for 45 min. No solids.

REW:jd

cc: LG Johnson (2)
RE Wheeler

-2-3

EX 106.1

Date: June 7, 1974

To: R. L. Walser
ORIGINAL SIGNED BY

From: R. E. Wheeler

Subject: ANALYSIS OF TANK FARM SAMPLES
SAMPLE: T-3766 106-BX

Vis-OTR: Yellow, Clear, No solids. 100 mrad/hr

pH: 11.9

SpG: 1.194

OH: 0.721 MAl: 4.28×10^{-2} MNa: 5.22 MNO₂: 3.69 MNO₃: 1.27 MPu: 9.39×10^{-6} g/l

DTA: No Exotherms

SO₄: 0.175 MPO₄: 5.54×10^{-2} MF: 6.20×10^{-3} MCO₃: 0.552 MGEA: ¹³⁴Cs - 1.23×10^2 μ Ci/gal¹³⁷Cs - 2.31×10^5 μ Ci/gal

Water: 75.22%

Cooling Curve: 20°C for 45 min. No solids.
15°C for 45 min. No solids.
10°C for 45 min. No solids
5°C for 60 min. No solids.30% Reduction - 25%
50% Reduction - 50%Solids - 0.25 %
Solids - 0.75%

REW:jd

cc: LG Johnson
RE Wheeler

B X 106. 2

Date: December 4, 1974
 To: R. L. Walser
 From: R. E. Wheeler *R. E. Wheeler*
 Subject: ANALYSIS OF TANK FARM SAMPLES
 SAMPLE: T-8441 106-BX *A*

Vis-OTR: Green. < 10% solids. 0.45 Rad/hr
 pH: > 14.0
 SpG: 1.4901
 OH: 3.33 M
 Al: 2.89 M
 Na: 12.55 M
 NO₂: 1.954 M
 NO₃: 2.76 M
 Pu: < 5.34×10^{-6} gm/gal
 DTA: No exotherm below 200°C
 SO₄: Insufficient Sample
 PO₄: 1.18×10^{-2} M
 F: Insufficient sample
 CO₃: 0.244 M
 GEA: ¹³⁴Cs - 9.95×10^3 μ Ci/gal
           ¹³⁷Cs - 1.46×10^5 μ Ci/gal
^{89,90}Sr: Insufficient sample
 Water: 43.35%
 Cooling Curve: Insufficient Sample

REW:jd

cc: JS Buckingham
       WR Christensen
       RM Ginestet
       RE Wheeler
       JC Womack

TCRC-5

Atlantic Richfield Hanford Company

WHC-SD-WM-ER-311, Rev. 0

BX106.3

Date: October 27, 1975
To: R. L. Walser
From: R. E. Wheeler, 2-2449 *R. E. Wheeler*
Subject: ANALYSIS OF TANK FARM SAMPLES
Sample: T-3855 Tank: 106-BX ✓
Received: April 21, 1975

Vis-OTR: Light brown < 10% Solids 1 rad/hr
pH: 13.92
SpG: 1.3739
OH: 2.09 M
Al: 1.15 M
Na: 7.10 M
NO₂: 1.94 M
NO₃: 2.43 M
Pu: 4.0×10^{-4} g/gal
D.T.A.: No exotherm below 200°C
SO₄: Cancelled
PO₄: 2.41×10^{-2} M
^{89,90}Sr: 7.24×10^4 μCi/gal
F: 9.59×10^{-3} M
CO₃: 0.264 M
GEA: ¹³⁴Cs - 8.45×10^3 μCi/gal
¹³⁷Cs - 1.28×10^6 μCi/gal
Water: 57.80%

Atlantic Richfield Hanford Company

R. L. Walser
Page 2
October 27, 1975

Cooling Curve: 20°C for 45 min. No solids.
15°C for 45 min. No solids.
10°C for 45 min. No solids.
5°C for 45 min. No solids.

REW:eyw

cc: JS Buckingham
WR Christensen
RM Ginestet
RE Wheeler
JC Womack

7-12C-8

WHC-SD-WM-ER-311, Rev. 0

2-12-90
3-1-90
3-1-90

Westinghouse Hanford Company
Office of Sample Management

Commercial FAX # (509) 373-3992
FTS FAX # 440-3992

Company Name: *WHC*

Fe CN TFS
✓ ✓
102, 103, 110, 111
EX

Contact Name: *V. Boyles*

FAX Number: *3-2908* Telephone

Sender: *R. Weiss*

Description: *BX Form liquid analysis*

Number of Pages (Including Coversheet): *8*

Date Sent: *3-16-90*

If there are any problems with this transmission, please call
sending party on 373-4718.

R.L. WEISS

DON'T SAY IT -- *Write It!*

DATE March 16, 1990

TO VC Bayles

FROM R L Weiss

3-3367

The following sheets report the results of analysis on six supernate samples taken from the 241-BX tank farm tanks early this year. For the samples from tanks 106BX and 109BX, small amounts of solids (less than 1%) were noted. Additional analysis of these samples was performed by mixing the samples to suspend the solids and then analyzing the "slurry" for radionuclide content. The results from these analysis are included identified as Slurry on the respective sheets.

Comments on the analyses:

The correlation between AT and known alpha emitters (Am/Pu) is not good. The AT values may have been influenced by the significant quantities of cesium present in the samples. I'd recommend not placing too much confidence in the AT results. If more confidence in the results is needed, more work should be performed.

Three OH values are marked with an *. These result from a measured neutralization titration of the sample at approximately pH 7.5. This is too low for "normal OH". No base capacity was seen for these samples in the normal OH range (pH >10). It is likely that the procedure was actually measuring neutralization of the second phosphate charge. I think that there is minimal true "free" hydroxide in these samples. The measured pH values of the samples (9.6, 11.4, 10.4) indicate minimal hydroxide concentrations.

Components for which a less than value was reported were not used to calculate wt % results. Phosphate results were also not included in the wt % calculation to avoid double calculation of the phosphorus quantity.

This should complete analysis of these samples. Please call me if you have any questions or if you need additional analyses performed.

Rich Weiss

SUPERNATE LIQUID 241-BX-106
R6037

<u>CHEMICAL</u>	<u>Component</u>	<u>Concentration</u>	<u>Wt %</u>
	Al	2.83E-01 M	0.58
	Ca	2.48E-04 M	0.00
	Cr	2.31E-02 M	0.09
	Hg	0.00E+00 M	0.00
	K	1.11E-01 M	0.33
	Na	7.05E+00 M	12.23
	P	1.99E-02 M	0.05
	U	7.36E-03 g/l	0.00
	Cl ⁻	9.65E-02 M	0.26
	F ⁻	<7.80E-02 M	
	NO ₂ ⁻	1.69E+00 M	5.88
	NO ₃ ⁻	2.62E+00 M	12.25
	PO ₄ ⁻⁻⁻	<1.58E-01 M	
	SO ₄ ⁻⁻	<1.60E-01 M	
	OH ⁻	2.07E+00 M	2.65
	CO ₃ ⁻⁻	9.33E-01 M	4.23
	TOTAL		38.53
	DENSITY	1.33 g/ml	
	%H ₂ O	63.8 wt %	
	TOC	4.4 g/l carbon	
	pH	13.28	

RADIONUCLIDES**Supernate**

AT	5.37E+00	uCi/l
TB	2.44E+05	uCi/l
Cs-137 (water)	1.81E+05	uCi/l
Cs-137 (acid)	1.96E+05	uCi/l
Sr-89/90	5.16E+02	uCi/l
Pu-239/240	1.29E-01	uCi/l
Am-241	<2.38E-01	uCi/l

Slurry

Cs-137	1.77E+05	uCi/l
Sr-89/90	6.50E+02	uCi/l
Pu-239/240	2.51E-01	uCi/l
Am-241	3.93E-01	uCi/l

H-96

*transferred
10/11/91*

BX106.4

14-11-91

CHEMICAL	Component	Concentration	Wt %
	Al	2.83E-01 M	0.58
	Ca	2.48E-04 M	0.00
	Cr	2.31E-02 ³ M	0.091
	Hg	~~0.00E+00~~ M	0.00
	K	1.11E-01 M	0.33
	Na	7.05E+00 M	12.23
	P	1.99E-02 M	0.05
	U	7.36E-03 g/l	0.00
	Cl ⁻	9.65E-02 M	0.26
	F ⁻	<7.80E-02 M	
	NO ₂ ⁻	1.69E+00 M	5.88
	NO ₃ ⁻	2.62E+00 M	12.25
	PO ₄ ⁻⁻⁻	<1.58E-01 M	
	SO ₄ ⁻⁻	<1.60E-01 M	
	OH ⁻	2.07E+00 M	2.65
	CO ₃ ⁻⁻	9.33E-01 M	4.23
	TOTAL		38.53 45
	DENSITY	1.33 g/ml	
	%H ₂ O	63.8 wt %	
	TOC	4.4 g/l carbon	
	pH	13.28	

RADIONUCLIDES

Supernate		
AT	5.37E+00	uCi/l
TB	2.44E+05	uCi/l
Cs-137 (water)	1.81E+05	uCi/l
Cs-137 (acid)	1.96E+05	uCi/l
Sr-89/90	5.16E+02	uCi/l
Pu-239/240	1.29E-01	uCi/l
Am-241	<2.38E-01	uCi/l

Miscellaneous -
Have duplicate
copy in TCRC-8

Slurry		
Cs-137	1.77E+05	uCi/l
Sr-89/90	6.50E+02	uCi/l
Pu-239/240	2.51E-01	uCi/l
Am-241	3.93E-01	uCi/l

TCRC-1

Atlantic Richfield Hanford Company

Date: November 20, 1974
To: R. L. Walser
From: R. E. Wheeler *R. E. Wheeler*
Subject: ANALYSIS OF TANK FARM SAMPLES
SAMPLE: T-5921 107-BX

Vis-OTR: Clear, yellow. No solids. 300 mRad/hr
pH: 10.18
SpG: 1.238
OH: 0.723 M
Al: 1.53×10^{-3} M
Na: 5.29 M
NO₂: 1.82 M
NO₃: 1.51 M
R Pu: 2.67×10^{-4} gm/gal
F DTA: No exotherm below 200°C
SO₄: Deleted by R. L. Walser
PO₄: 6.15×10^{-2} M
F: 2.16×10^{-2} M
CO₃: 0.674 M
F GEA: $^{134}\text{Cs} - 7.38 \times 10^2$ $\mu\text{Ci/gal}$
 $^{137}\text{Cs} - 3.40 \times 10^5$ $\mu\text{Ci/gal}$
Water: 75.28%

Cooling curve: 30°C for 60 min. No solids.
25°C for 45 min. No solids.
20°C for 45 min. No solids.
15°C for 45 min. No solids.
10°C for 45 min. No solids.
5°C for 45 min. No solids.

REW:jd

cc: JS Buckingham
WR Christensen
RM Ginestet
JC Womack
RE Wheeler

TGR-2
May 2, 1979

65120-79-080 J

G. W. Grimes
Process Engineering
2750-E, 200 East
2-2881, Ext. 286

J. E. Horton
Chemical Sciences Group
222-S, 200 West
2-2529

Status of Core Segments from Tank 107-BX

Three core segments from Tank 107-BX were analyzed for physical characteristics and radionuclide concentrations. The three core segments yielded a total of 127 cm of sludge. The solids were 45 percent water soluble. Their color was yellowish, with red streaking intermixed throughout the samples. The core segments had a consistency of soft putty.

Core segment number three had varying sized chunks of a hard material ranging from pea size to marble size. The color of these harder chunks were reddish brown, white, and yellow. Analytical data completed to date are reported in Table I.

If you have any questions, please call me.

J. E. Horton
J. E. Horton, Specialist
Waste Chemistry Unit

JEH:jkr

Attachment

Information: L. C. Brown
J. S. Buckingham
J. DiPietro
D. J. Flesher
L. R. Hill
F. M. Jungfleisch
M. J. Kupper
A. G. Miller
M. J. Smith
File: KW42E

Table I
DATA FOR TANK 107-BX CORE SEGMENTS

<u>Core Segments</u>	<u>No. 1</u>	<u>No. 2</u>	<u>No. 3</u>
P Bulk Density	1.42 g/cc	1.42 g/cc	1.54 g/cc
P Percent Water	53.0	55.0	53.0
Thermoanalysis (DTA)			
Exotherms	None	None	None
Endotherms	105°C & 287°C	105°C & 290°C	105°C & 290°C
GEA μ ci/Kg			
Cs 134	8.8	3.3	5.2
Cs 137	2.01×10^5	8.21×10^4	1.10×10^5
Eu 154	24.0	12.0	21.0
Eu 155	1.35×10^3	68.0	1.01×10^3
Radiation Readings			
MR/ hr			
Surface	200	75	50
Open	1800	600	200

Core Segment Composite Data (Water Soluble Solids)

Sr 89+90	0.003 μ ci/g
Cs 137	2.74 μ ci/g

7-2-75
Internal Letter

Rockwell WHC-SD-WM-ER-311, Rev. 0

May 15, 1979

No. 65440-79-132

TO: (Organization Internal Address)

FROM: (Name and Title)

D. J. Flesher
Project Engineering
2750E, 200 E

L. R. Hill
Statistics
271-U, 200 W
2-2120

Statistical Analysis of 107-BX Core Segments

Here are the results of the statistical analysis of the core segment data from tank 107-BX. These three segments were the ones recovered and chemically analyzed out of the six segments making up the core. The purpose of this work was to estimate the data values for the missing segments. Statistical methods determined that the data provides no basis for distinguishing between homogeneity and any trend with depth. In view of this, nothing can be gained by assuming a more complicated relationship than homogeneity. Therefore, 95% confidence intervals are given in Table I for the levels of four radionuclides in the core, assuming the core to be homogeneous.

The primary objective in these statistical analyses was to find a consistent relationship among the measured isotope levels in the three recovered segments. This would allow inferences to be made about the missing segments. Specifically, we wished to find a formula for compositing the three recovered segments which would represent a composite of the entire core. For this to be done with three segments, the relationship would have had to be a linear function of depth. No such relationship could be found. More complex relationships could not be explored with only three samples. An attempt was made to compare the ratio of soluble to insoluble elements using the ratio Cs^{137}/Eu^{155} . No useful results could be gained here either.

If you have any questions, or if you want to see the calculations please call me at 2-2273.

L.R. Hill

L. R. Hill
Statistician
Statistics

LRH/dm

Attachment

cc: L. C. Brown
G. W. Grimes
J. E. Horton
L. P. McRae
S. Rubinstein *SR*
File

TABLE I

95% Confidence Interval ($\mu\text{Ci/kg}$)

^{134}Cs	$(6.443 \times 10^{-1} , 4.402 \times 10^{+1})$
^{137}Cs	$(1.733 \times 10^{+3} , 8.634 \times 10^{+4})$
^{154}Eu	$(3.726 , 8.938 \times 10^{+1})$
^{155}Eu	$(2.236 \times 10^{+1} , 4.233 \times 10^{+2})$

TCRC-4
Internal Letter

107 BX

06 WHC-SD-WM-ER-311, Rev. 0
Rockwell International

Date: July 25, 1979

June 1979

65120-79-115 J

TO: *Same as to J. E. Horton*

. D. J. Flesher
. Process Engineering
. 2750-E, 200 East
. 2-7811, Ext. 295

. J. E. Horton
. Chemical Sciences Group
. 222-S, MO-037, 200 West
. 2-2529

Subject: Chemical and Physical Characterization of Tank 107-BX

Ref: Letter, May 2, 1979, J. E. Horton to G. W. Grimes, Status of
Core Segments from Tank 107-BX

The three core segments from Tank 107-BX were composited and prepared for chemical analysis. These solids are from the first cycle bismuth phosphate waste. The three core segments yielded a total of 127 cm of sludge. The calculated heat generation from $^{89+90}\text{Sr}$ and ^{137}Cs content was 2.19×10^{-4} watts per liter. The solids were 45 percent water soluble. The main component in the water soluble solid was NaNO_3 , with lesser amounts of PO_4^{3-} , SO_4^{2-} , and Si . The main component in the water insoluble solid was BiPO_4 , with lesser amounts of Al^{3+} and Fe^{3+} . The complete analysis is reported in Table I. Physical characteristics of each individual core segment were reported in the reference.

If you have any questions regarding this work, please call me.

J. E. Horton
J. E. Horton, Specialist
Waste Chemistry Unit

JEH:jkr

Attachment

Information: L. C. Brown
J. S. Buckingham
G. W. Grimes
L. R. Hill
F. M. Jungfleisch
M. J. Kupfer
L. P. McRae
A. E. Van Liuk
File Code: KF24E

Table I

ANALYSIS OF COMPOSITE ON SOLIDS FROM WHC-SD-WM-ER-311, Rev. 0

Bulk Density 1.46 g/cc
Percent Water 54.0

Component	Water Soluble	Water Soluble (KOH Fusion)
Al ³⁺	NR*	1.6 %
Bi ³⁺	<0.03 %	1.6 %
Cd ²⁺	NR	<0.003 %
CO ₃ ⁻²	0.1 %	NR
Cr ³⁺	0.007 %	NR
F ⁻	0.09 %	0.13 %
Fe ³⁺	NR	1.4 %
Hg ²⁺	NR	0.01 %
La ³⁺	NR	0.04 %
Mn ²⁺	NR	0.005 %
Na ⁺	6.5 %	NR
Ni ²⁺	<0.001 %	0.5 %
OH ⁻	<0.04 %	NR
Pb ²⁺	<0.03 %	1.3 %
PO ₄ ⁻³	1.5 %	7.1 %
SiO ₄	0.02 %	0.3 %
SO ₄ ⁻²	0.8 %	0.12 %
NO ₃ ⁻	14.0 %	1.3 %
Am	NR	2.70 x 10 ⁻³ g/g
¹³⁷ Cs ⁺	2.74 μ ci/g	8.40 μ ci/g
²³⁹ Pu***	8.51 x 10 ⁻¹¹ g/g	1.75 x 10 ⁻⁶ g/g
⁸⁹⁺⁹⁰ Sr ²⁺	0.004 μ ci/g	14.20 μ ci/g
U ⁶⁺ ***	5.5 x 10 ⁻³ g/g	8.00 x 10 ⁻⁵ g/g
TOC**	NR	7.30 x 10 ⁻⁴ g/g

Material Balance: 92.0%

*Not Requested.

**Total Organic Carbon

***All Valence States

Internal Letter

Rock

WHC-SD-WM-ER-311, Rev. 0

Date: September 18, 1980

No: 65453-80-265

TO: (Name, Organization, Internal Address)

F. M. Jungfleisch
Systems Engineering
2750E/A212/200 East

FROM: (Name, Organization, Internal Address, Phone)

D. R. Bratzel
Separations Process Development Unit
222-S/MO-037/200 West
3-2529

Subject: Evaluation of Waste Storage Tank Physical and Chemical Characterization Data

Refs: (A) Letter, 65124-79-017, J. E. Horton to D. J. Flesher, "Physical and Chemical Characterization of Tank 104-T", dated November 13, 1979.

(B) Letter, 65124-79-046, M. E. Mitchell to D. J. Flesher, "Physical and Chemical Characterization of Tanks 104-TY and 106-TY", dated December 20, 1979.

(C) Letter, M. E. Mitchell to D. J. Flesher, "Physical and Chemical Characteristics of Tanks 105-TY, 103-TY and 102-TY", dated February 1, 1980.

(D) Draft document, F. M. Jungfleisch, "Hanford High Level Waste Characterization - A Status Report, RHO-CD-1019, dated July, 1980.

(E) "Analytical Methods and Capabilities - Analytical Laboratories Department" - RHO-MA-218, 1979.

Introduction

Characterization of samples from twelve waste tanks have been completed and reported to date (References A-D). Laboratory procedures and draft documentation have been prepared for physical and chemical characterization methodology. The purpose of this letter is to evaluate the referenced physical and chemical data in regard to questioned methods of calculation and format.

Physical and Chemical Data Evaluation

Weight percent values are calculated on analytical data for both water soluble and insoluble fractions of waste tank samples. Inconsistencies have been found in the method of calculation of weight percent values on both the water soluble and insoluble fractions in characterization reports (Reference A-D). Weight percent values were previously calculated by differing methods and unit values in respect to either a total composite value or a water soluble-insoluble fraction weight percent value. Analytical data has been recalculated and is presented in Tables 1.0.0 through 12.0.0. Weight percent values are calculated in respect to total sample weight.

Many of the physical analyses values (i.e., percent water, bulk density, particle density, and water solubility) were also inconsistent in respect to documented laboratory physical analyses data. Numerous composite physical analyses values were calculated from combined individual segment data rather

Table 1.0.0
Tank 107-BX

WHC-SD-WM-ER-311, Rev. 0

Chemical Characterization

<u>Ion/Radionuclide</u>	<u>H₂O Soluble Wt %</u>	<u>H₂O Insoluble Wt %</u>
Al ³⁺	NR	1.64
Bi ³⁺	$<3.4 \times 10^{-2}$	1.61
Cd	NR	1.5×10^{-3}
Cl ⁻	NR	NR
CO ₃ ²⁻	1×10^{-1}	NR
Cr ³⁺	6.87×10^{-3}	NR
Fe ³⁺	NR	1.43
F ⁻	8.7×10^{-2}	1×10^{-1}
Hg ²⁺	NR	1.31×10^{-1}
La ³⁺	NR	4.38×10^{-2}
Mn ²⁺	NR	5.27×10^{-3}
Na ⁺	6.48	9.91×10^1
		$1.10 \times 10^{2*}$
Ni ²⁺	$<1.6 \times 10^{-3}$	5.04×10^{-1}
NO ₃ ⁻	1.40×10^1	1.3
OH ⁻	$<5 \times 10^{-2}$	NR
Pb ²⁺	$<2 \times 10^{-3}$	NR
PO ₄ ³⁻	1.5	7.2
Si	1.8×10^{-2}	1.27×10^{-1}
SO ₄ ²⁻	8.1×10^{-1}	1.2×10^{-1}
Zr	NR	NR
TOC	NR	7.3×10^{-4} g/g
²⁴¹ Am	NR	2.70×10^{-9} g/g
¹³⁷ Cs	2.74 µCi/g	8.37 µCi/g
Pu	8.51×10^{-11} g/g	1.75×10^{-6} g/g
^{89/90} Sr	2.3×10^{-3} µCi/g	1.42×10^1 µCi/g
U	5.50×10^{-7} g/g	7.99×10^{-5} g/g
¹⁴⁴ Ce	$<2.54 \times 10^{-2}$ µCi/g	8.37 µCi/g

* Rerun

NR = Not Requested

$$361,000 \text{ g sludge} \times 3.78 \text{ g/g} \times 1400 \text{ g/g} = 1.9 \times 10^6 \text{ g}$$

$$7.3 \times 10^{-4} \text{ g TOC/g} \times 1.9 \times 10^6 \text{ g} = 1.39 \times 10^6 \text{ g TOC}$$

$$45,100 \text{ g Liq} \times 3.78 \text{ g/g} = 170,478 \text{ g}$$

$$\text{Tot} = \frac{1.39 \times 10^6}{1.70 \times 10^5} = 8.2 \text{ g/g water insoluble}$$

TCRC-6

03/16/90

11:17

CER

WHC-SD-WM-ER-311, Rev. 0

BX-107

E. E. Edington
3-14-90
Don Deitzel
3-1-228

Westinghouse Hanford Company
Office of Sample Management

Commercial FAX # (509) 373-3992
FTS FAX # 440-3992

Company Name: *WHC*

Contact Name: *V. Boyles*

FAX Number: *3-2908* Telephone Number: *3-1321*

Sender: *R. Weiss*

Description: *BX Form liquid analysis*

Number of Pages (Including Coversheet): *8*

Date Sent: *3-16-90*

If there are any problems with this transmission, please call
sending party on 373-4718.

SUPERNATE LIQUID 241-BX-10:
R6038

WHC-SD-WM-ER-311, Rev. 0

DX10

<u>CHEMICAL</u>	<u>Component</u>	<u>Concentration</u>		<u>Wt %</u>
	Ba	6.53E-05	M	0.00
	Cr	6.59E-03	M	0.03
	Cu	7.84E-05	M	0.00
	Fe	4.64E-04	M	0.00
	Hg	0.00E+00	M	0.00
	K	1.23E-02	M	0.04
	Mo	6.13E-04	M	0.00
	Na	4.22E+00	M	7.94
	P	1.70E-01	M	0.43
	Pb	1.64E-04	M	0.00
	Si	9.29E-03	M	0.02
	U	8.58E-01	g/l	0.07
	Cl ⁻	6.09E-02	M	0.18
	F ⁻	7.47E-02	M	
	NO ₂ ⁻	7.43E-01	M	2.80
	NO ₃ ⁻	2.64E+00	M	13.41
	PO ₄ ⁻⁻⁻	1.62E-01	M	
	SO ₄ ⁻⁻	1.81E-01	M	1.42
	OH ⁻	1.09E-01 [*]	M	
	CO ₃ ⁻⁻	2.74E-01	M	1.35
	TOTAL			27.70
	DENSITY	1.22	g/ml	
	xH ₂ O	72.0	wt %	
	TOC	2.7	g/l carbon	
	pH	9.64		

RADIONUCLIDES

AT	2.90E+01	uCi/l
TB	2.88E+04	uCi/l
Cs-137 (water)	2.49E+04	uCi/l
Cs-137 (acid)	2.48E+04	uCi/l
Sr-89/90	5.71E+01	uCi/l
Pu-239/240	4.24E+00	uCi/l
Am-241	2.49E-01	uCi/l

~~TCRC-5~~

Date: May 20, 1975
To: W. P. Metz
From: J. S. Buckingham *JS Buckingham*
Subject: ANALYSES OF TANK FARM LIQUID SAMPLES
Reference: Letter, May 16, 1975, W. I. Winters
to J. S. Buckingham, "Preliminary
Report on Actinide Analyses of
Samples from Hanford Waste Tanks"

Methods for determining actinide concentrations in alkaline waste solutions are being developed. The reference letter reports the actinide analysis of liquid samples from six waste tanks. In addition to the actinide analyses, other analyses have been made on the samples and are reported in this letter.

The analyses showed that all of the samples contained soluble ^{239}Pu , greater than maximum permissible concentration in water (MPC_w) for a controlled zone. Soluble ^{237}Np was near or below MPC_w for a controlled zone. The two samples from East area's BX Tank Farm showed soluble ^{241}Am to be near or below MPC_w for a controlled zone. Soluble ^{241}Am was above MPC_w for the samples from S and TX Tank Farms. In addition, the analyses showed greater than 99 curi percent of the ^{241}Am in the samples from S and TX Tank Farms were insoluble and could be removed by filtering through a 0.25 μm filter. Details of the analyses are discussed on the following pages.

W. P. Metz
Page 2
May 20, 1975

PROCEDURE

Solids had precipitated from all of the samples by the time they had arrived in the laboratory. The samples were heated to redissolve the precipitated solids before aliquots were taken. All of the precipitated solids redissolved between 60 and 85° C except for the solids in the sample from 109-BX which contained about 20 settled volume percent insoluble solids. The 109-BX sample was slurried and aliquots were taken of the slurry. The 109-BX slurry was treated in the same manner as the clear solutions from the other samples.

Except for the sample from 109-BX, when the solids had redissolved, 50 milliliters of the solution were immediately diluted with 50 milliliters of water. A second aliquot was taken at the same temperature for density and percent water.

The diluted samples were filtered through a 0.25 μ m Solviment® (trade name, Millipore Corporation) filter. Analyses were made on the filtered solution. Analytical results shown in Table I are based on the undiluted heated solution.

The filters were washed with four 25 milliliter portions of 0.05M NaOH. The washed filter was analyzed by counting on a lithium drifted germanium detector [Ge(Li)]. The material on the filters is insoluble solids. The gamma energy analyses, reported in Table II, are based on the amount of insoluble (filterable) solids per liter of undiluted heated solution.

W. P. Metz
Page 3
May 20, 1975

DISCUSSION

The MPC_w for soluble actinides of interest in a controlled zone are shown in Table II. There are undoubtedly insoluble plutonium solids on the filters, but with the other activity present on the filter, the detection limit for ²³⁹Pu would be in the 10⁷ µCi/l range. W. I. Winters is going to look at analytical techniques for analyzing the insoluble material.

It is interesting to note that americium is associated only with S and TX samples. Waste from 234-5 building americium recovery process is processed through the 242-T Evaporator which accounts for the high americium analyses in the TX samples.

Other than ¹³⁷Cs, most of the gamma activity in the waste is associated with insoluble solids. Cesium found on the filter may be due to small aluminosilicate solids such as cancrinite which trap cesium.

The sample from 109-3X contained so many insoluble solids it was not possible to count the filter on the Ge(Li) detector. The appearance of the solids was similar to sludge in that they were reddish-brown and very flocculant.

Please call me if you have any questions regarding this work.

JSB:ms

Att. (3)

cc: H Babad
WR Christensen
JE Hammelman
NL Harms
SJ Johanson
DC Lini
RC Roal

NC Rodewald
WW Schulz
RE Van der Cook
RL Walser
WI Winters
Process Aids (7)
File
LB

107.1

TABLE I

ANALYSIS OF ALKALINE WASTE SOLUTIONS

Density, g/ml at °C	102-S			109-BX			110-BX			109-TX			118-TX		
	1.333 75	1.484 85	1.69H 95	1.333 85	1.484 85	1.69H 95	1.333 85	1.484 85	1.69H 95	1.485 65	1.375 65	1.485 65	1.375 65	1.485 65	1.375 65
H ₂ O	41.6%	54.6%	54.6%	0.005H	0.005H	0.005H	0.005H	0.005H	0.005H	0.005H	0.005H	0.005H	0.005H	0.005H	0.005H
H ₂ AlO ₂	6.0%	9.3%	9.3%	1.33H	1.33H	1.33H	1.33H	1.33H	1.33H	1.48H	1.48H	1.48H	1.48H	1.48H	1.48H
H ₂ SiO ₂	5.6%	10.0%	10.0%	4.50H	4.50H	4.50H	4.50H	4.50H	4.50H	2.63H	2.63H	2.63H	2.63H	2.63H	2.63H
H ₂ CO ₃	24.1%	24.6%	24.6%	0.01H	0.01H	0.01H	0.01H	0.01H	0.01H	5.76H	5.76H	5.76H	5.76H	5.76H	5.76H
H ₂ PO ₄	6.1%	10.3%	10.3%	0.22H	0.22H	0.22H	0.22H	0.22H	0.22H	2.32H	2.32H	2.32H	2.32H	2.32H	2.32H
H ₂ SO ₄	1.6%	1.6%	1.6%	0.05H	0.05H	0.05H	0.05H	0.05H	0.05H	0.26H	0.26H	0.26H	0.26H	0.26H	0.26H
H ₂ SiO ₃	0.7%	0.6%	0.6%	0.007H	0.007H	0.007H	0.007H	0.007H	0.007H	0.10H	0.10H	0.10H	0.10H	0.10H	0.10H
H ₂ SiO ₄	0.003H	0.003H	0.003H	0.003H	0.003H	0.003H	0.003H	0.003H	0.003H	0.004H	0.004H	0.004H	0.004H	0.004H	0.004H
H ₂ SiO ₅	0.006H	0.006H	0.006H	0.006H	0.006H	0.006H	0.006H	0.006H	0.006H	0.009H	0.009H	0.009H	0.009H	0.009H	0.009H
H ₂ SiO ₆	85.9%	110.0%	110.0%	4.32 x 10 ⁴	4.32 x 10 ⁴	4.32 x 10 ⁴	4.32 x 10 ⁴	4.32 x 10 ⁴	4.32 x 10 ⁴	5.19 x 10 ⁸	5.19 x 10 ⁸	5.19 x 10 ⁸	5.19 x 10 ⁸	5.19 x 10 ⁸	5.19 x 10 ⁸
TOTAL	3.61 x 10 ⁵	6.33 x 10 ⁵	6.33 x 10 ⁵	6.33 x 10 ⁵	6.33 x 10 ⁵	6.33 x 10 ⁵	6.33 x 10 ⁵	6.33 x 10 ⁵	6.33 x 10 ⁵	122.5%	122.5%	122.5%	122.5%	122.5%	122.5%
137Cu	1.05 x 10 ³	2.07 x 10 ⁴	2.07 x 10 ⁴	1.01 x 10 ⁴	1.01 x 10 ⁴	1.01 x 10 ⁴	1.01 x 10 ⁴	1.01 x 10 ⁴	1.01 x 10 ⁴	3.67 x 10 ⁵	3.67 x 10 ⁵	3.67 x 10 ⁵	3.67 x 10 ⁵	3.67 x 10 ⁵	3.67 x 10 ⁵
134Cu	2.97 x 10 ³	1.01 x 10 ⁴	1.01 x 10 ⁴	1.01 x 10 ⁴	1.01 x 10 ⁴	1.01 x 10 ⁴	1.01 x 10 ⁴	1.01 x 10 ⁴	1.01 x 10 ⁴	1.43 x 10 ³	1.43 x 10 ³	1.43 x 10 ³	1.43 x 10 ³	1.43 x 10 ³	1.43 x 10 ³
135Sb	3.27	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	4.93 x 10 ³	4.93 x 10 ³	4.93 x 10 ³	4.93 x 10 ³	4.93 x 10 ³	4.93 x 10 ³
138+240Pu	0.19	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	3.21	3.21	3.21	3.21	3.21	3.21
238Pu	0.05	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.045	0.045	0.045	0.045	0.045	0.045
237Pu	9.1	4.07	4.07	4.07	4.07	4.07	4.07	4.07	4.07	0.02	0.02	0.02	0.02	0.02	0.02
241Am										1.48	1.48	1.48	1.48	1.48	1.48

BX/10.8

TABLE II

FILTERABLE ACTIVITY IN ALKALINE WASTE SOLUTIONS
 $\mu\text{Ci/l}$ UNFILTERED SOLUTION

	102-S	111-S	110-BX	109-TX	118-TX
^{241}Am	2.11×10^3	4.92×10^3	-	6.61×10^3	8.65×10^4
^{144}Ce	2.07×10^4	5.51×10^4	-	8.05×10^3	8.02×10^3
^{154}Eu	6.60×10^3	1.21×10^4	-	1.41×10^3	4.56×10^2
^{155}Eu	2.23×10^4	3.99×10^4	3.01×10^2	4.62×10^3	1.49×10^3
^{134}Cs	5.24×10^2	9.93×10^2	-	82.4	79.6
^{137}Cs	1.34×10^5	8.95×10^4	1.23×10^3	4.30×10^3	1.14×10^4
^{57}Co	-	-	39.8	-	-
^{60}Co	1.78×10^3	7.40×10^3	2.25×10^3	4.10×10^2	1.78×10^2
^{106}Rh	8.45×10^3	5.57×10^5	3.28×10^2	3.25×10^3	-
^{95}Zr	3.09×10^2	5.68×10^3	-	71.3	22.4
^{125}Sb	2.61×10^3	1.87×10^4	-	1.22×10^3	-

TABLE III

SOLUBLE MPC_w FOR CONTROLLED AREA

	$\mu\text{Ci/l}$
^{239}Pu	0.1
^{240}Pu	0.1
^{238}Pu	0.1
^{237}Np	0.09
^{241}Am	0.1

TCRC-5v
Internal Letter

WHC-SD-WM-ER-311, Rev. 0

3X 110.1

Bx 110.2

well International

February 14, 1979

60120-79-024

Ref 2"

D. J. Flesher
Process Engineering
2750-E, 200 East
2-2881, Ext. 294

J. E. Horton
Chemical Sciences Group
222-S, 200 West
2-2529

Physical and Chemical Characterization of Core Segment #3, Tank 110BX

Three core segments were drilled in Tank 110BX; however, only the third core segment contained enough sample for characterization. This segment contained 43.2 cm. of sludge. There was a small number of large reddish crystals on top of the sludge. The sludge sample was yellowish to a dual gray in color, with a consistency like soft putty. Approximately 40 weight percent of the solids were water soluble. The water soluble portion was primarily Bi^{+2} and PO_4^{-3} . There was also quite a lot of Al^{+3} , Fe^{+3} , and SiO_2 . The complete analysis is shown in Table I. The calculated heat generation due to $^{89+90}\text{Sr}$ and ^{137}Cs was 1.16×10^{-4} watts/liter. The large reddish crystals on top of the sludge were analyzed separately. The crystals were completely water soluble. The analysis of the crystals is shown in Table II.

If you have any questions, please call me.

J. E. Horton, Specialist
Waste Chemistry Unit

JEH:jkr

Information: J. S. Buckingham
G. W. Grimes
F. M. Jungfleisch *FMJ*
M. J. Kupfer
Process Aids (7)

Table I

CHEMICAL AND PHYSICAL ANALYSIS (CONTENT & PERCENT)
TANK 110BX, SAMPLE 1010-C

<u>Components</u>	<u>Water Soluble</u>	<u>Acid (Fusion)</u>
Al*	<0.1%	1.8%
Bi ³⁺	<0.01%	3.3%
CO ₃ ²⁻	<0.01%	--
CrO ₂ ⁻	<0.01%	0.3%
F ⁻	0.2%	
Fe*	0.03%	1.4%
La ³⁺	--	0.02%
Na ⁺	17%	--
NO ₃ ⁻	20%	--
PO ₄ ³⁻	1.8%	9.8%
SO ₄ ²⁻	1.2%	--
SiO ₂ ²⁻	<0.2%	1.4%
Total Organic C	0.01%	0.06%
U*	5.07x10 ⁻⁶ g/g	4.23x10 ⁻⁴ g/g
239Pu*	5.57x10 ⁻¹⁰ g/g	2.13x10 ⁻⁶ g/g
89+90Sr ²⁺	5.73x10 ⁻⁴ μCi/g	7.8 μCi/g
137Cs+	11.8 μCi/g	35.5 μCi/g

S/4.001

Physical Properties:

Bulk Density	1.44 g/cc	$1.443 \times 0.07\% (= 0.0007) = \frac{0.001009}{cc}$
Percent Water	42.0	$\frac{0.001009 \times 1000 cc}{1} = 1.0 g/2$
Thermal Analysis (DTA)	No Exotherms	
Calculated Heat	1.16x10 ⁻⁴ Watts/Liter content of 89+90Sr & 137C	

Water Solubility	40.0%
Material Balance	101.6%

* All oxidation states

Table II

ANALYSIS OF LARGE RED CRYSTALS
FROM TANK 110BX

Components	Water Soluble	Acid (Fusion)
Al*	NR	NR
Bi ³⁺	<0.2%	
CO ₃ ²⁻	NR	
CrO ₄ ²⁻	0.07%	
Cl ⁻	NR	
F ⁻	1.5%	
Fe*	0.003%	
Hg*	NR	
K ⁺	NR	
La ³⁺	NR	
Mn*	NR	
Ni ²⁺	NR	
NO ₂ ⁻	NR	
NO ₃ ⁻	20.8%	
Na ⁺	20.6%	
OH ⁻	2.2%	
PO ₄ ³⁻	10.0%	
SO ₄ ²⁻	1.3%	
SiO ₂ ²⁻	0.1%	
U*	6.48×10^{-6} g/g	
Pu*	5.41×10^{-7} g/g	
Am*	NR	
89+90Sr ²⁺	0.023 μ ci/g	
137Cs ⁺	47.7 μ ci/g	
155Eu*	NR	
Zr	<0.03%	

Water Solubility	99+%
Bulk Density	1.71 g/cc
Percent Water	30.0

*All oxidation states
NR -- Analysis not requested

Internal Letter

Date: September 18, 1980 TCRC-6 ✓ No: 6545. WHC-SD-WM-ER-311, Rev. 0

TO: (Name, Organization, Internal Address)

F. M. Jungfleisch
Systems Engineering
2750E/A212/200 East

FROM: (Name, Organization, Internal Address, Phone)

D. R. Bratzel
Separations Process Development Unit
222-S/MO-037/200 West
3-2529

Subject: Evaluation of Waste Storage Tank Physical and Chemical Characterization Data

Refs: (A) Letter, 65124-79-017, J. E. Horton to D. J. Flesher, "Physical and Chemical Characterization of Tank 104-T", dated November 13, 1979.

(B) Letter, 65124-79-046, M. E. Mitchell to D. J. Flesher, "Physical and Chemical Characterization of Tanks 104-TY and 106-TY", dated December 20, 1979.

(C) Letter, M. E. Mitchell to D. J. Flesher, "Physical and Chemical Characteristics of Tanks 105-TY, 103-TY and 102-TY", dated February 1, 1980.

(D) Draft document, F. M. Jungfleisch, "Hanford High Level Waste Characterization - A Status Report, RHO-CD-1019, dated July, 1980.

(E) "Analytical Methods and Capabilities - Analytical Laboratories Department" - RHO-MA-218, 1979.

Introduction

Characterization of samples from twelve waste tanks have been completed and reported to date (References A-D). Laboratory procedures and draft documentation have been prepared for physical and chemical characterization methodology. The purpose of this letter is to evaluate the referenced physical and chemical data in regard to questioned methods of calculation and format.

Physical and Chemical Data Evaluation

Weight percent values are calculated on analytical data for both water soluble and insoluble fractions of waste tank samples. Inconsistencies have been found in the method of calculation of weight percent values on both the water soluble and insoluble fractions in characterization reports (Reference A-D). Weight percent values were previously calculated by differing methods and unit values in respect to either a total composite value or a water soluble-insoluble fraction weight percent value. Analytical data has been recalculated and is presented in Tables 1.0.0 through 12.0.0. Weight percent values are calculated in respect to total sample weight.

Many of the physical analyses values (i.e., percent water, bulk density, particle density, and water solubility) were also inconsistent in respect to documented laboratory physical analyses data. Numerous composite physical analyses values were calculated from combined individual segment data rather

Chemical Characterization

WHC-SD-WM-ER-311, Rev. 0

<u>Ion/Radionuclide</u>	<u>H₂O Soluble Wt %</u>	<u>H₂O Insoluble Wt %</u>
Al ³⁺	NR	1.84
Bi ³⁺	$<1.03 \times 10^{-2}$	3.84
Cd	$<3.36 \times 10^{-2}$	NR
Cl ⁻	NR	NR
CO ₃ ²⁻	NR	NR
Cr ³⁺	$<8.18 \times 10^{-3}$	1.31×10^{-1}
Fe ³⁺	$<4.15 \times 10^{-4}$	1.41
F ⁻	1.70×10^{-1}	Deleted
Hg ²⁺	NR	NR
La ³⁺	NR	1.51×10^{-2}
Mn ²⁺	NR	NR
Na ⁺	1.32×10^1	NR
Ni ²⁺	NR	NR
NO ₃ ⁻	1.40×10^1	NR
OH ⁻	NR	NR
Pb ²⁺	NR	NR
PO ₄ ³⁻	1.93	9.81×10^{-2}
Si	NR	1.78×10^{-1}
SO ₄ ²⁻	5.76×10^{-1}	$<2.91 \times 10^{-1}$
Zr	NR	$<3.1 \times 10^{-2}$
TOC	1.69×10^{-4} g/g	6.00×10^{-4} g/g
²⁴¹ Am	NR	NR
¹³⁷ Cs	1.18×10^1 µCi/g	3.55×10^1 µCi/g
	1.18×10^1 µCi/g	3.74×10^1 µCi/g
Pu	5.57×10^{-5} g/g	2.13×10^{-6} g/g
^{89/90} Sr	5.59×10^{-4} µCi/g	7.79 µCi/g
U	5.08×10^{-6} g/g	4.23×10^{-5} g/g

* Rerun

NR = Not Requested

$$195,000 \text{ gal} \times 3.78 \text{ L/gal} \times 1450 \text{ g/L} = 1.07 \times 10^9 \text{ g}$$

$$1.69 \times 10^{-4} \text{ g TOC/g} \times 1.07 \times 10^9 \text{ g} = 1.8 \times 10^5 \text{ g TOC}$$

$$26,800 \text{ gal} \times 3.78 \text{ L/gal} = 1.01 \times 10^5 \text{ L}$$

$$\frac{1.8 \times 10^5 \text{ g TOC}}{1.01 \times 10^5 \text{ L}} = 1.8 \text{ g/L water soluble}$$

Table 2.0.1

Physical Properties of Tank 110-BX Wastes

Analysis										
	1	2*	3*	4	5	6	7	8	9	Composite
Percent Water (wt%)										51.9
Bulk Density (g/cm ³)										1.45
Particle Density (g/cm ³)										1.83
Water Solubility (wt%)										
Thermal Analysis										

*No physical analyses performed

#2 and #3 segments were both saltcake matrix.

03/15/90

11:17

CSM

TLRL-8 ✓

MTK

WHC-SD-WM-ER-311, Rev. 0

Ed Ewington
3-1472
Dave Engel
3-1228

Westinghouse Hanford Company
Office of Sample Management

Commercial FAX # (509) 373-3992
FTS FAX # 440-3992

Company Name: WHC

Contact Name: V. Boyles

FAX Number: 3-2908 Telephone Number: 3-1321

Sender: R. Weiss

Description: BX Form liquid analysis

✓ ✓
102, 106, 110 &

✓
111-BX are

on FCCN

111

Number of Pages (Including Coversheet): 8

Date Sent: 3-16-90

If there are any problems with this transmission, please call
sending party on 373-4718.

DON'T SAY IT -- *Write It!*

DATE March 16, 1990

TO VC Boyles

FROM R L Weiss

The following sheets report the results of analysis on six supernate samples taken from the 241-BX tank farm tanks early this year. For the samples from tanks 106BX and 109BX, small amounts of solids (less than 1%) were noted. Additional analysis of these samples was performed by mixing the samples to suspend the solids and then analyzing the "slurry" for radionuclide content. The results from these analysis are included identified as Slurry on the respective sheets.

Comments on the analyses:

The correlation between AT and known alpha emitters (Am/Pu) is not good. The AT values may have been influenced by the significant quantities of cesium present in the samples. I'd recommend not placing too much confidence in the AT results. If more confidence in the results is needed, more work should be performed.

Three OH values are marked with an *. These result from a measured neutralization titration of the sample at approximately pH 7.5. This is too low for "normal OH". No base capacity was seen for these samples in the normal OH range (pH >10). It is likely that the procedure was actually measuring neutralization of the second phosphate charge. I think that there is minimal true "free" hydroxide in these samples. The measured pH values of the samples (9.6, 11.4, 10.4) indicate minimal hydroxide concentrations.

Components for which a less than value was reported were not used to calculate wt % results. Phosphate results were also not included in the wt % calculation to avoid double calculation of the phosphorus quantity.

This should complete analysis of these samples. Please call me if you have any questions or if you need additional analyses performed.

Rich Weiss

SUPERNATE LIQUID 241-BX-110
R6040

WHC-SD-WM-ER-311, Rev. 0

<u>CHEMICAL</u>	<u>Component</u>	<u>Concentration</u>	<u>Wt %</u>
	Al	1.96E-02 M	0.04
	Ca	2.24E-04 M	0.00
	Cr	1.87E-02 M	0.07
	Hg	0.00E+00 M	0.00
	K	7.48E-02 M	0.21
	Mo	6.98E-04 M	0.00
	Na	7.14E+00 M	12.00
	P	1.31E-02 M	0.03
	Si	1.56E-03 M	0.00
	U	4.29E-03 g/l	0.00
	Cl ⁻	1.38E-01 M	0.36
	F ⁻	<7.42E-02 M	
	NO ₂ ⁻	7.94E-01 M	2.67
	NO ₃ ⁻	5.04E+00 M	22.83
	PO ₄ ⁻⁻⁻	<1.50E-01 M	
	SO ₄ ⁻⁻	<1.52E-01 M	
	OH ⁻	1.38E+00 M	1.71
	CO ₃ ⁻	2.87E-01	1.26
	TOTAL		41.19
	DENSITY	1.37 g/ml	
	%H ₂ O	56.6 wt %	
	TOC	5.6 g/l carbon	
	pH	12.5	

RADIONUCLIDES

AT	<4.24E+00	uCi/l
TB	1.67E+05	uCi/l
Cs-137 (water)	1.35E+05	uCi/l
Cs-137 (acid)	1.31E+05	uCi/l
Sr-89/90	1.50E+01	uCi/l
Pu-239/240	<7.99E-02	uCi/l
Am-241	<2.60E-01	uCi/l

Reviewed 10/11/91

7CRL-4✓

BX-111

WHC-SD-WM-ER-311, Rev. 0

2.1 Edington
3-1973
2.1 Edington
3-1-228

Westinghouse Hanford Company
Office of Sample Management

Commercial FAX # (509) 373-3992
FTS FAX # 440-3992

Company Name: WHC

Contact Name: V. Boyles

FAX Number: 3-2908 Telephone Number: 3-1321

Sender: R. Weiss

Description: BX Form liquid analysis

Number of Pages (Including Coversheet): 8

Date Sent: 3-16-90

If there are any problems with this transmission, please call
sending party on 373-4718.

DON'T SAY IT -- *Write It!*

DATE March 16, 1990

TO VC Boylex

FROM R L Weiss 3-3367

The following sheets report the results of analysis on six supernate samples taken from the 241-BX tank farm tanks early this year. For the samples from tanks 106BX and 109BX, small amounts of solids (less than 1%) were noted. Additional analysis of these samples was performed by mixing the samples to suspend the solids and then analyzing the "slurry" for radionuclide content. The results from these analysis are included identified as Slurry on the respective sheets.

Comments on the analyses:

The correlation between AT and known alpha emitters (Am/Pu) is not good. The AT values may have been influenced by the significant quantities of cesium present in the samples. I'd recommend not placing too much confidence in the AT results. If more confidence in the results is needed, more work should be performed.

Three OH values are marked with an *. These result from a measured neutralization titration of the sample at approximately pH 7.5. This is too low for "normal OH". No base capacity was seen for these samples in the normal OH range (pH > 10). It is likely that the procedure was actually measuring neutralization of the second phosphate charge. I think that there is minimal true "free" hydroxide in these samples. The measured pH values of the samples (9.6, 11.4, 10.4) indicate minimal hydroxide concentrations.

Components for which a less than value was reported were not used to calculate wt % results. Phosphate results were also not included in the wt % calculation to avoid double calculation of the phosphorus quantity.

This should complete analysis of these samples. Please call me if you have any questions or if you need additional analyses performed.

Rick Weiss

CHEMICAL	Component	Concentration	Wt %
	Al	1.45E+00 M	2.71
	Ca	2.84E-04 M	0.00
	Cr	9.14E-03 M	0.03
	Hg	<1.3E-07 M	
	K	1.64E-01 M	0.45
	Na	9.33E+00 M	14.90
	P	1.29E-02 M	0.03
	Si	2.28E-03 M	0.00
	Zn	1.58E-04 M	0.00
	U	7.65E-03 g/l	0.00
	Cl ⁻	1.40E-01 M	0.35
	F ⁻	<7.68E-02 M	
	NO ₂ ⁻	1.38E+00 M	4.43
	NO ₃ ⁻	2.62E+00 M	11.28
	PO ₄ ⁻⁻⁻	<1.56E-01 M	
	SO ₄ ⁻⁻	<1.58E-01 M	
	OH ⁻	3.43E+00 M	4.05
	CO ₃ ⁻⁻	5.98E-01	2.50
	TOTAL		40.73
	DENSITY	1.44 g/ml	
	%H ₂ O	53.3 wt%	
	TOC	5.7 g/l carbon	
	pH	12.7	

RADUINUCLIDES

AT	7.10E+00	uCi/l
TB	3.17E+05	uCi/l
Cs-137 (water)	2.59E+05	uCi/l
Cs-137 (acid)	2.51E+05	uCi/l
Sr-89/90	1.99E+01	uCi/l
Pu-239/240	8.58E-02	uCi/l
Am-241	<1.38E-01	uCi/l

TCRC-1
Internal Letter

WHC-SD-WM-ER-311, Rev. 0

Re

Date: August 15, 1979

No. 65120-79-122 J

TO: Name, Organization, Initials, Address,

. D. J. Flesher
. Process Engineering
. 2750-E, 200 East
2-1025

FROM: Name, Organization, Initials, Address, Phone,

. J. E. Horton
. Chemical Sciences Group
. 222-S, MO-037, 200 West
2-2529

Subject: Chemical and Physical Characterization of Core Segments from
Tank 112-BX

Three core segments were received from Tank 112-BX. The three core segments yielded a total of 81.3 cm of sludge. The bulk density for Core Segment No. 1 was 1.23 g/cc; Core Segment No. 2, 1.22 g/cc; and Core Segment No. 3 was 1.21 g/cc. The calculated heat generation, due to $^{89+90}\text{Sr}$ and ^{137}Cs content, was 5.63×10^{-4} watts per liter. Thermal analysis (DTA) showed no exothermic reactions between 25° C and 500° C. The "as received" sludge solids were 24.0 percent water soluble. The sludge solids were light yellow in color, having a consistency of soft putty. The primary components in the water soluble solids were Na^+ , NO_3^- , and PO_4^{3-} . The primary components in the water insoluble solids were Al^{3+} , Bi^{3+} , F^- , NO_3^- , PO_4^{3-} , and Si^{4+} . A complete analysis is reported in Tables I and II. Analysis for Cl^- , La^{3+} , and Hg^{2+} had not been completed by Analytical Laboratory at the writing of this report. The 112-BX sample was given to Analytical Laboratory on June 11. The time span is greater than the ten days promised by Analytical Laboratory for completion of data.

If you have any questions regarding this work, please call me.

J. E. Horton
J. E. Horton, Specialist
Waste Chemistry Unit

JEH:jkr

Attachment 2

Information: L. C. Brown
J. S. Buckingham
J. S. Ci Pietro
G. W. Grimes
K. Iwatate
F. M. Jungfleisch
M. J. Kupfer
L. P. McRae
D. L. Uebelacker
File Code: KV42E

Table I
CHEMICAL ANALYSIS "CONTENT AND PERCENT"
Tank 112-BX

Components	Water Soluble	Water Insoluble
Al ³⁺	NR	3.9%
Bi ³⁺	<0.01%	3.8%
CO ₃ ²⁻	<0.2%	NR
Cr ³⁺	0.01%	0.2%
Cl ⁻	NR	NR
F ⁻	0.03%	1.8%
Fe*	NR	.6%
Hg ²⁺	NR	.01%
Cd ²⁺	NR	<0.003%
La ³⁺	NR	NR
Mn ⁴⁺	NR	0.02%
Ni ²⁺	<0.001%	4.4%
Pb ²⁺	<0.004%	NR
NO ₃ ⁻	9.2%	5.0%
Na ⁺	5.4%	5.8%
OH ⁻	pH.7	NR
PO ₄ ³⁻	6.2%	4.8%
SO ₄ ²⁻	0.6%	
Si ⁴⁺	0.2%	1.9%
U*	7.92×10^{-7} g/g	1.40×10^{-3} g/g
²³⁹ Pu	2.97×10^{-4} g/g	7.46×10^{-6} g/g
²⁴¹ Am	NR	2.03×10^{-8} g/g
⁸⁹⁺⁹⁰ Sr ²⁺	3.19×10^{-3} μ ci/g	20.5 μ ci/g
¹³⁷ Cs ⁺	6.98 μ ci/g	59.7 μ ci/g
W*	No Method	NR
Zr ⁴⁺	<0.1%	NR
TOC**	1.22×10^{-3} g/g	8.93×10^{-3} g/g

NR - Not Requested.

* - All oxidation states.

** - Total Organic Carbon.

Table II
PHYSICAL PROPERTIES
Tank 112-BX

* included in BX112.1
(ave. only)

<u>Segment No.</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>Average</u>
Waste Type	Sludge			
* Bulk Density (g/cc)	1.23	1.22	1.21	⇒ 1.22
* Percent Water	63.0	62.0	63.0	⇒ 62.6
Thermo Analysis (DTA)	Endotherm at 105° C			

Date: September 18, 1980

No: 6545

WHC-SD-WM-ER-311, Rev. 0

TCRC-2

TO: (Name, Organization, Internal Address)

FROM: (Name, Organization, Internal Address, Phone)

F. M. Jungfleisch
Systems Engineering
2750E/A212/200 East

D. R. Bratzel
Separations Process Development Unit
222-S/MO-037/200 West
3-2529

Subject: Evaluation of Waste Storage Tank Physical and Chemical
Characterization Data

Refs: (A) Letter, 65124-79-017, J. E. Horton to D. J. Flesher,
"Physical and Chemical Characterization of Tank 104-T",
dated November 13, 1979.

(B) Letter, 65124-79-046, M. E. Mitchell to D. J. Flesher,
"Physical and Chemical Characterization of Tanks 104-TY
and 106-TY", dated December 20, 1979.

(C) Letter, M. E. Mitchell to D. J. Flesher, "Physical and
Chemical Characteristics of Tanks 105-TY, 103-TY and
102-TY", dated February 1, 1980.

(D) Draft document, F. M. Jungfleisch, "Hanford High Level
Waste Characterization - A Status Report, RHO-CD-1019,
dated July, 1980.

(E) "Analytical Methods and Capabilities - Analytical Labora-
tories Department" - RHO-MA-218, 1979.

Introduction

Characterization of samples from twelve waste tanks have been completed and reported to date (References A-D). Laboratory procedures and draft documentation have been prepared for physical and chemical characterization methodology. The purpose of this letter is to evaluate the referenced physical and chemical data in regard to questioned methods of calculation and format.

Physical and Chemical Data Evaluation

Weight percent values are calculated on analytical data for both water soluble and insoluble fractions of waste tank samples. Inconsistencies have been found in the method of calculation of weight percent values on both the water soluble and insoluble fractions in characterization reports (Reference A-D). Weight percent values were previously calculated by differing methods and unit values in respect to either a total composite value or a water soluble-insoluble fraction weight percent value. Analytical data has been recalculated and is presented in Tables 1.0.0 through 12.0.0. Weight percent values are calculated in respect to total sample weight.

Many of the physical analyses values (i.e., percent water, bulk density, particle density, and water solubility) were also inconsistent in respect to documented laboratory physical analyses data. Numerous composite physical analyses values were calculated from combined individual segment data rather

F. M. Jungfleisch
Page 2
September 18, 1980

than physically analyzing a composite core segment blend. Laboratory documented physical analyses and visual characteristics are presented in Tables 1.0.1 through 12.0.1. Calculation of composite physical values requires weighted averaging of the respective sampled aliquots from individual core segments.

The water insoluble fraction of Tank 104-TY composite sample was analyzed without prior separation of the water soluble constituents. Even though the soluble fraction was minimal (insufficient solubility data recorded), this data represents a combined soluble-insoluble sample analysis. No additional sample was archived to reanalyze the insoluble fraction. Water insoluble data presented in Table 6.1.0 should therefore be treated as a combined water soluble-insoluble fraction analysis.

Chemical analyses reported as a 'validated result' in Tables 1.0.0 through 12.0.0 are those analyses which comply with data validation program specifications. This program ensures that characterization of working reference materials (WRMs) are verified as standards defined by the following criteria:

- o Demonstration that each analytical method/analyst is capable of performing to specifications.
- o Demonstration of adequate performance in sample analysis.

Chemical analyses in Tables 1.0.0 through 12.0.0 reported as 'deleted' occur when no adequate method exists or the analysis was cancelled.

Numerous analyte concentration results were previously reported (Reference D) as a 'below detectable limit' (BDL) statement. BDL statements are originally logged by the Analytical Laboratory (QA) as a numerical 'less than' value limit. 'Less than' values give users a more tangible result to work with in terms of calculating maximum concentrations of constituents which may be present. 'Less than' values are reported within Tables 1.0.0 through 12.0.0 in place of previously cited BDL statements. These values are derived from method and/or instrument dependent parameters inherent to each specific analysis. Exceptions to this are 'less than' values documented from Analytical Laboratory method capabilities (Reference E). Data presented as such are noted within the accompanying tables.

For many of the analyses an analyte is often present in large quantities but cannot be measured due to high instrument detection limits. Sample preparation dilutions can also lower the concentrations of constituents below instrument detection levels. Reported sulfate and nitrate concentrations (<70 - 100 weight percent) are examples of analytes present in concentrations below effective detection limits. In these cases, new methods currently in development or technology transfer for routine use require implementation

F. M. Jungfleisch
Page 3
September 18, 1980

prior to further analyses for useful and cost effective data.

[Handwritten signature]

D. R. Bratzel
Advanced Chemist

DRB/naj

Distribution:

J. F. Albaugh

M. M. Beary

L. C. Brown

J. S. Buckingham

D. J. Flesher

D. R. Gustavson

G. L. Hanson

K. M. Hodgson

B. A. Higley

J. R. Jewett

M. J. Kupfer

L. P. McRae

O. C. Mudd

R. A. Palmer

S. Rubenstein

Letterbook

Process Aids: (8)

Table 3.0.0
Tank 112-BX
Chemical Characterization

WHC-SD-WM-ER-311, Rev. 0

<u>Ion/Radionuclide</u>	<u>H₂O Soluble Wt %</u>	<u>H₂O Insoluble Wt %</u>
Al ³⁺	NR	3.9
Bi ³⁺	$<1 \times 10^{-2}$	3.83
Cd	NR	$<5 \times 10^{-3}$
Cl ⁻	2.52×10^{-1}	NR
CO ₃ ²⁻	$<2 \times 10^{-1}$	NR
Cr ³⁺	1.02×10^{-2}	2.37×10^{-1}
Fe ³⁺	NR	5.53×10^{-1}
F ⁻	2.60×10^{-1}	1.80
Hg ²⁺	NR	4.51×10^{-1}
La ³⁺	NR	4.74×10^{-1}
Mn ²⁺	NR	1.88×10^{-2}
Na ⁺	5.40	5.82
Ni ²⁺	$<1 \times 10^{-3}$	4.40
NO ₃ ⁻	9	5.0
OH ⁻	NR	NR
Pb ²⁺	$<3 \times 10^{-3}$	NR
PO ₄ ³⁻	6.2	4.77
Si	8.18×10^{-2}	8.80×10^{-1}
SO ₄ ²⁻	5.49×10^{-1}	$<2 \times 10^1$
Zr	$<1.1 \times 10^{-1}$	NR
TOC	1.22×10^{-3} g/g	8.93×10^{-3} g/g
²⁴¹ Am	NR	2.0×10^{-8} g/g
¹³⁷ Cs	6.98 μ Ci/g	5.97×10^1 μ Ci/g
Pu	2.97×10^{-9} g/g	7.46×10^{-6} g/g
^{89/90} Sr	3.19×10^{-3} μ Ci/g	2.05×10^1 μ Ci/g
U	7.92×10^{-7} g/g	1.40×10^{-3} g/g

NR = Not Requested

$$157,000 \text{ gal} \times 3.78 \frac{\text{L}}{\text{gal}} \times 1380 \frac{\text{g}}{\text{L}} = 8.19 \times 10^6 \text{ g}$$

$$8.19 \times 10^6 \times 1.22 \times 10^{-3} = 9.99 \times 10^3$$

$$17,600 \text{ gal} \times 3.78 = 74,080 \text{ L}$$

$$\frac{9.99 \times 10^3}{7.4 \times 10^4} = 13.5 \frac{\text{g TOC}}{\text{L}} \text{ water soluble}$$

$$8.93 \times 10^{-3} \times 8.19 \times 10^6 = 7.31 \times 10^4$$

$$\frac{7.31 \times 10^4}{7.4 \times 10^4} = 98.8 \frac{\text{g TOC}}{\text{L}} \text{ water insoluble}$$

Table 3.0.1

Physical Properties of 112-BX Wastes

Analysis	1	2	3	4	5	6	7	8	9	Composite
Percent Water (wt%)	63.13	62.01	62.82							57.47
Bulk Density (g/cm ³)	1.226	1.224	1.208							1.38
Particle Density (g/cm ³)	1.446	1.395	1.347							1.953
Water Solubility (wt%)										
Thermal Analysis										Endotl 105'

Segment

- #1 - Approximately 6" sludge and 20 mL supernate. Total sample -224.63 g.. Archive-61.60g. Composite blend - 75g
- #2 - Approximately 12" sludge and 50 mL supernate. Same visual appearance as #1. Total sample-494.68g. Archive - 47.65g. Composite blend-30g.
- #3 - Approximately 14" sludge and 100 mL supernate. Total Sample 517.09g. Archive - 66.00g. Composite blend-30g.

BX Tank Farm

241-BX-101

Photo date: 11-24-88

I-2

241-BX-102

Photo date: 09-18-85

241-BX-103

Photo date: 10-31-86

I-4

241-BX-104

Photo date: 9-21-89

241-BX-105

Photo date: 10/23/86

241-BX-106

Photo date: 5-19-88

I-7

WHC-SD-WM-ER-311, Rev. 0

241-BX-107

Photo date: 9-11-90

241-BX-108

Photo date: 10-23-86

6-I

241-BX-109

Photo date: 9-11-90

I-10

241-BX-110

Photo date: 7-31-85

TANK 110-BX
SURFACE LEVEL 6'-7"
January 15, 1980

TANK 110-BX
SURFACE LEVEL 6'-4 1/2"
January 31, 1978

241-BX-111

Photo date: 7-16-93

I-14

241-BX-112

Photo date: 9-11-90

1-J-1

241-BX-102 Unknown Transfers

J-3

J-4

J-5

241-BX-103 Cumulative Unknowns

J-7

J-10

J-14

WHC-SD-WM-ER-311, Rev. 0

Derived from LANL Waste Status and Transaction Record Summary V2.0b (Agnew 1994)

81-J

J-19

Derived from LANL Waste Status and Transaction Record Summary V2.0b (Agnew 1994)

Derived from LANL Waste Status and Transaction Record Summary V2.0b (Agnew 1994)

Derived from LANL Waste Status and Transaction Record Summary V2.0b (Agnew 1994)

Derived from LANL Waste Status and Transaction Record Summary V2.0b (Agnew 1994)

BX Farm Solids

[illegible]

Derived from LANL Waste Status and Transaction Record Summary V2.0b (Agnew 1994)

[illegible]

Derived from LANL Waste Status and Transaction Record Summary V2.0b (Agnew 1994)

[illegible]

Derived from LANL Waste Status and Transaction Record Summary V2.0b (Agnew 1994)

Tank	Year	Qtr	Meas. Solids	Solids Change	Predicted Layer	Layer Type	Waste Volume (K Gal)
BX-105	1954	2					-530
	1954	4	5				
	1955	1	1				
	1955	3	0				
	1963	2	106				445
	1963	2		106		unk	
	1965	2	98	-8			
	1968	1	95				
	1968	2	98	3		CWP	
	1969	3	65	-36			
	1972	1	52	-13			
	1974	4	54				
	1977	2	62	10		B1SlCk	
	1977	3	79	17			
	1978	2	62	-17			
	1978	3	65				
	1978	4	73	11			
	1980	2	57				
	1993	2	46	-27	46	unk	
BX-106	1954	2					1060
	1955	2					-2922
	1955	2		33		MW	
	1955	2		13		CWP	443
	1965	2	54	8		unk	
	1968	4	33	-21			
	1969	3	0				
	1970	4	37				
	1971	1	43				
	1971	4	51				
	1972	1	65				
	1972	2	40	7			
	1972	3	10				
	1974	4	26	-14	26	MW	
	1977	3	29				
	1993	2	31	5	5	unk	

Derived from LANL Waste Status and Transaction Record Summary V2.0b (Agnew 1994)

Tank	Year	Qtr	Meas. Solids	Solids Change	Predicted Layer	Layer Type	Waste Volume (K Gal)
BX-109	1953	1	34	34	34	1C	
	1954	3	314	314		UR	6277
	1955	1	298				
	1957	2	320				
	1957	4	298				
	1964	2	244	-70			
	1965	2	296				
	1968	4	283				
	1969	3	250				
	1972	2	211				
	1974	4	200				
	1975	1	206				
	1975	3	200	-44			
	1976	2	208				
	1993	2	193	-7	159	UR	
BX-110	1950	2		264		1C	1060
	1953	1	133				
	1954	1	276	12			
	1954	2	236				
	1957	2	248				
	1957	4	326			B1SlCk	
	1963	2	197			CW	
	1965	2	277				
	1969	3	156	-120	156	1C	
	1972	1	290				
	1972	2	227				
	1973	2	238				
	1974	1	288				
	1974	4	249				
	1976	1	250				
	1976	2	249				
	1980	1	200				
	1993	2	198	42	42	BYSltCk	

Derived from LANL Waste Status and Transaction Record Summary V2.0b (Agnew 1994)

Tank	Year	Qtr	Meas. Solids	Solids Change	Predicted Layer	Layer Type	Waste Volume (K Gal)
BX-111	1954	1	32	32	32	1C	
	1957	2	62	30		B1SlCk	
	1957	4	51				
	1965	2	79	17			
	1969	3	33	-46			
	1972	1	118				
	1972	2	68				
	1973	2	128				
	1974	1	234				
	1974	4	216				
	1977	4	211				
	1993	2	211	178	179	BYSltCk	
BX-112	1951	4		132	132	1C	530
	1953	1	239	107		unk	
	1954	1	270	31			
	1957	2	287				
	1963	2	271				
	1965	2	318	3		CW	
	1965	2		45			
	1969	3	134				
	1972	3	232				
	1973	1	216				
	1974	4	178				
	1978	4	169				
	1993	2	164	-154	32	unk	