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7. Abstract

The K Basins Material Accounting (MAC) database system user guide describes the user features and functions, and the document is structured like the database menus.

8. RELEASE STAMP

K BASINS

DATABASE SYSTEMS

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M A C

Materials Accounting Database

User Guide

Software Version 3.3

Vern K. Russell

**WESTINGHOUSE HANFORD COMPANY
INFORMATION RESOURCE MANAGEMENT**

September 22, 1994

MASTER
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Table of Contents

1.0 INTRODUCTION	1
1.1 Purpose	1
1.2 Scope	1
1.3 Classification	1
1.4 Background	1
1.5 Overview	2
1.6 Disaster Recovery and Problem Reporting	3
2.0 SYSTEM STARTUP	4
2.1 Starting K Basin Application Selection Program	4
2.1.1 From DOS Prompt	4
2.1.2 From User Menu	4
2.1.3 From Windows	4
3.0 MAC MAIN MENU	6
3.1 Update Function	7
3.1.1 Encapsulate	9
3.1.1.1 Select Canister to Encapsulate	9
3.1.1.2 Select Canister's new Status	11
3.1.2 BasintoBasin (Basin to Basin Canister Move)	19
3.1.2.1 Select Canister for Basin to Basin Move	19
3.1.3 InBasin (Canister Movement within a Basin)	21
3.1.3.1 Select Canister for a move within a Basin	22
3.1.4 Add (Add Material To a Canister)	24
3.1.4.1 Select Canister to Receive Material	24
3.1.5 Delete (Remove a Canister Record)	27
3.1.5.1 Select Canister to Delete	27
3.1.6 Package (Package Material In a Canister)	29
3.1.6.1 Select Canister to Repackage Material In	29
3.1.7 Change (Change Material In a Canister)	32
3.1.7.1 Select Target Canister	32
3.2 Report Functions	35
3.2.1 Daily Report	36
3.2.2 Compact Report	37
3.2.3 Worksheets Report	38
3.2.4 History Report	41
3.2.5 Map Report	43
3.2.6 Key File Summary Report	45
3.2.7 Storage Bucket Summary Report	45
3.2.8 Canister Package Report	45
3.2.9 Empty Report	46
3.2.10 Unpack Report	46

3.3 Print Functions	47
3.3.1 Print Daily Report	47
3.3.2 Print Compact Report	47
3.3.4 Print History Report	49
3.3.5 Print Map Report	50
3.3.6 Print Key File Summary Report	50
3.3.7 Print StoBucSum Report	51
3.3.8 Print Canister Package Report	51
3.3.9 Print Empty Report	51
3.3.10 Print Unpack Report	51
3.4 Help Functions	52
3.4.2 Display History Tables	54
3.4.3 Display All (Location, Canister, and Material) Tables	55
3.4.4 Display Location Table	56
3.4.5 Display Canister Table	56
3.4.6 Display Material Table	57
3.4.7 Display Factor Table	57
3.5 Xport Daily Files	58
3.6 Open a New MAC Revision	58
3.7 Close Current Revision	58
3.8 FileLoad	59
3.9 Executive	59
3.10 Backup	59
3.11 GoParadox and Applications	60
3.12 ZDOS, Return, and Leave	60
4.0 <u>REFERENCES</u>	61
5.0 <u>APPENDIX A</u> -- Reports	62
6.0 <u>APPENDIX B</u> -- ATP Cross Reference	94

List of Figures:

Figure 1 Paradox Applications Menu	4
Figure 2 MAC Logo Screen	5
Figure 3 MAC Main Menu	6
Figure 4 Mac Update Menu	8
Encapsulation Input screen (Figure 5)	9
Figure 5A	10
Figure 5B	10
Figure 5C	11
Figure 5D	11
Figure 5E	12
Figure 5F	12
Figure 5G	13
Figure 5H	13
Figure 5I	14
Figure 6 Canister Contents Data Entry	15
Figure 5J	16
Figure 7 Canister Contents	16
Figure 5K	17
Figure 5L	17
Figure 5M	18
Figure 5N	18
Basin to Basin Movement Input screen (Figure 8)	19
Figure 8A	20
Figure 8B	20
Figure 8C	20
Figure 8D	21
In Basin Movement Input screen (Figure 9)	21
Figure 9A	22
Figure 9B	22
Figure 9C	23
Figure 9D	23
Add to Contents Input screen (Figure 10)	24
Figure 10A	25
Figure 10B	25
Figure 11 Edit Screen for Adding Material	26
Delete Records Input screen (Figure 12)	27
Figure 12A	27
Figure 12B	28
Figure 12C	28
Package Canister Input screen (Figure 13)	29
Figure 13A	30
Figure 13B	30
Figure 13C	30
Figure 14 Edit Screen for Repackaging Material	31
Change Contents Input screen (Figure 15)	32
Figure 15A	33
Figure 15B	33
Figure 15C	33

Figure 16 Edit Screen for Changing Material	34
Figure 17 MAC Reports Menu	35
Figure 18 Report Range Menu	36
Figure 18A	36
Figure 18B	36
Figure 19 Worksheet Selection Menu	38
Figure 20 Worksheet Basin Selection Menu	38
Figure 21 Worksheet Report Range Menu	39
Shipping Worksheet (Figure 22)	39
Figure 22A	40
Figure 22B	41
Figure 23 History report menu	41
Figure 24 History Report Range Menu	42
Figure 24A	42
Figure 24B	42
Figure 25 Map Basin Selection Menu	43
Figure 26 Map Report Range Menu	43
Figure 26A	44
Figure 26B	44
Figure 27 Empty Basin Selection Menu	46
Figure 28 Print device menu	47
Figure 29 Print Worksheet Menu	48
Figure 30 Print Basin Selection Menu	48
Figure 31 Print History Menu	49
Figure 32 Print Map Menu	50
Figure 33 Help Menu	52
Figure 34 Daily Encapsulation Table Screen	53
Figure 35 History Tables Screen	54
Figure 36 All (Location, Canister, Material) Tables Screen	55
Figure 37 Location Table Screen	56
Figure 38 Canister Table Screen	56
Figure 39 Material Table Screen	57
Figure 40 Factor Table Screen	57

1.0 INTRODUCTION

1.1 Purpose

This document presents the Materials Accounting (MAC) database system user instructions which explain how to record the movements and configuration of canisters and materials within the K Basins on the computer, the mechanics of handling encapsulation tracking, and administrative functions associated with the system.

1.2 Scope

This document includes the user instructions, which also serve as the software requirements specification for the system implemented on the microcomputer. This includes suggested user keystrokes, examples of screens displayed by the system, and reports generated by the system. It shows how the system is organized, via menus and screens. It does not explain system design nor provide programmer instructions.

1.3 Classification

The microcomputer version of the MAC and the MAC data are unclassified.

1.4 Background

A database system (Reference 4.0), written in Fortran, has been used for a number of years to track the loading of fuel into the N reactor, discharge from the reactor, packaging, and to track storage in the N Basin, and in the K-East and K-West basins.

A microcomputer-oriented database management system (DBMS) now performs the MAC database functions, which were formerly done on a minicomputer system.

Many of the functions performed by the MAC system are no longer needed because of the mission change from production to cleanup at the Hanford Site, but the primary operations of tracking spent fuel are still essential.

When the MAC was converted from a minicomputer to its current microcomputer version on Paradox¹, the data structure was carried over virtually intact.

Since the conversion in 1990, the "Micro-MAC" has been enhanced through a series of change requests, with one major adjustment of the data structure to the third normal form.

¹Paradox is a trademark of Borland International, Inc.

An encapsulation campaign requires a "canister-oriented" data structure, an encapsulation function, and a daily reporting capability. The new data structure simplifies certain operations, such as moving a canister from one cubicle to another. In the former structure, for example, it was necessary to gather all the contents records and move them; now this function is accomplished by simply changing the canister location in a "Location vs Canister Number" table. The canister contents remain in a new "Material" table keyed by canister number.

Because many of the canisters in the K Basin database do not have the required unique canister numbers, they have been assigned temporary numbers. In most cases, the temporary canister numbers are an adaptation of the Fuel Canister Location. For example, a temporary canister number for the material in location E1234 might be 1234E. The temporary numbers will, of course, all be changed to permanent numbers as the encapsulation campaign progresses.

1.5 Overview

This document describes the user features and functions of the MAC system. This user guide is structured like the database menus. That is, the information is presented in terms of the keywords presented to the user as he/she moves through the various database options. Several features in this guide are designed to simplify its use, including figures showing the actual MAC system screens. In addition, instruction words alert users to steps or actions by using directions such as FILL, OBSERVE, MOVE CURSOR, FINALIZE, and NOTE.

The flow of the menus within the system is shown below:

MAC Main Menu					
Update	Report	Print	Help	Other Main Menu	Quit
Encapsulate	Daily		History	Xport	
Basin To Basin	Compact		All (Canister, Location, Material)	Open a New MAC Revision	
In Basin	History		Location	Close Current Revision	
Add	Map		Canister	FileLoad	
Delete	Key File Summary		Material	Executive	
Package	Storage Bucket Summary		Factor	Backup	
Change	Canister Package			Go Paradox	
	Empty				
	Unpack				

1.6 Disaster Recovery and Problem Reporting

Disaster recovery procedures and problem reporting procedures for the MAC system are discussed in WHC-SD-NR-CM-001 K Basins Database System Software Configuration Management Plan. If there are any other problems that require immediate attention please contact the SNM Specialist or the Software Engineer, as specified in the desk procedure.

2.0 SYSTEM STARTUP

2.1 Starting K Basin Application Selection Program

The MAC system has now been integrated with several other K Basin applications. A common program is now used to start any of these applications. The MAC system can be started from DOS, a user menu, or from Windows.

2.1.1 From DOS Prompt

To start the K Basin Application programs from a DOS prompt, type PRODAPPL and press <Enter>.

2.1.2 From User Menu

To start the K Basin Application programs from a user menu, highlight the words "K Basin Applications" and press <Enter>.

2.1.3 From Windows

To start the K Basin Applications from Windows, click on the K Basin Applications icon from within Program Manager.

Regardless of the start-up method used, the Paradox Applications Menu (Figure 1) will appear.

To select, Press first character or <Enter>. To see explanation, highlight the appropriate selection using the cursor movement keys.

CHOOSE:	Menu: Programs Directory: h:\pdxappls\
<u>M</u> AC <u>B</u> alance (MBA) <u>C</u> alendar <u>A</u> ction Tracking <u>E</u> xecutive <u>G</u> oParadox <u>W</u> ho's There <u>Q</u> uit	Materials Accounting Program Mass Balance Program Calendar / Scheduling Program Action Tracking / Completions Program Administrative (Executive) Functions Go to Paradox Who are the current persons using Paradox Leave Paradox

Figure 1 Paradox Applications Menu

2.2 Starting MAC from the Programs Menu

Press **M** to select the **MAC** system -or-
Move the cursor up or down along the Programs Menu until the **MAC** line is selected. Then press Enter (or **↵**)

NOTE: The cursor should already be on the **MAC** line upon entry into this menu.

After a greeting, the screen in Figure 2 appears:

Figure 2 MAC Logo Screen

After pressing a key, a message stating that menu information is being loaded is displayed. Finally, the MAC main menu appears on the screen.

3.0 MAC MAIN MENU

The MAC main menu appears on the screen as shown in Figure 3.

To select, Press first character or <Enter>. To see explanation, highlight the appropriate selection using the cursor movement keys.

CHOOSE:	Menu: macmain Directory: g:\mac\
<u>U</u> ppdate	Perform material changes and/or relocations
<u>R</u> eport	Generate materials accounting reports, worksheets, etc
<u>P</u> rint	Print files previously created with Report
<u>H</u> elp	View History, Material, Location, etc files
<u>X</u> port	Export daily encapsulation report
<u>O</u> penRev	Open current data revision number for further updates
<u>C</u> loseRev	Close the current data revision number
<u>F</u> ileLoad	Load (restore) one or more files from backup device
<u>E</u> xecutive	Add, delete, or change the list of valid users
<u>B</u> ackup	Copy database tables, program library to backup device
<u>G</u> oParadox	Go to Paradox
<u>A</u> pplications	Paradox Application Programs Menu
<u>Q</u> uit	Leave Paradox and return to DOS

Figure 3 MAC Main Menu

The MAC system is menu driven, activated by user-selected keywords. On screen, keywords are highlighted at the top of the screen and selected by moving the cursor to the keyword and pressing <Enter>. A quicker selection may be made by simply pressing the first character of the keyword.

Upon entry, the user is presented with a "pop-up" menu, with instructions at the top of the screen. Most of the time, the instructions are simply:

To select, Press first character or <Enter>. To see explanation, highlight the appropriate selection, using the cursor movement keys.

For example, refer to the MAC Main Menu, Figure 3. If one chooses Update, the next menu seen will present all of the Update options.

In some of the options, the user is led to view and/or modify a table, in which case the instructions at the top of the screen will be tailored specifically to the option.

3.1 Update Function

PRESS **U** to select **Update -or-**
Move the cursor Up or Down along the **MAC Main Menu** until the **Update** line is selected. Press Enter (or **↵**).

OBSERVE a prompt asking if the system password should be changed. Usually the user does not need to change the system password. In this case follow the Enter Password Sequence. If the system password needs to be changed follow the Change Password Sequence.

Enter Password Sequence:

FILL Change Password (Y/N) --> **N**

OBSERVE a prompt asking for the system password:

FILL Enter Password --> _____ **↵**

NOTE: If the correct password is entered, the MAC Update Menu (Figure 4) will appear on the screen. Otherwise the message "Incorrect Password Entered" and "Press any Key to Continue" will appear at the bottom of the screen.

PRESS Any Key.

The MAC Main Menu (Figure 3) will reappear on the screen.

Change Password Sequence:

This sequence is to be executed if the user has privileges to change the password and needs to change the system password.

NOTE: If the system password is changed, all users of the system need to be notified of the new system password.

FILL Change Password (Y/N) --> **Y**

OBSERVE a prompt asking for the old system password:

FILL Enter Old Password --> _____ **↵**

NOTE: If the correct password is not entered, the message "Incorrect Password Entered" and "Press any Key to Continue" will appear at the bottom of the screen.

PRESS Any Key.

The MAC Main Menu (Figure 3) will reappear on the screen.

If the correct password is entered, a prompt asking for the new system password will appear on the screen.

FILL Enter New Password --> _____

NOTE: End of password sequences, proceed with instructions below.

The MAC Update Menu appears on the screen (Figure 4) and is used to update the setup of fuel canisters and/or their material contents within the basins. Canister functions include encapsulation, moving, adding material, repackaging, or emptying. Each subsection below describes a menu selection.

To select, Press first character or <Enter>. To see explanation, highlight the appropriate selection using the cursor movement keys.

CHOOSE:	Menu: macreate	Directory: g:\mac\
<u>E</u> ncapsulate	Encapsulation campaign procedures	
<u>B</u> asinToBasin	Move (transfer) cubicle contents between basins	
<u>I</u> nBasin	Move (transfer) cubicle contents within a basin	
<u>A</u> dd	Add new material to a canister	
<u>D</u> elte	Delete material from a canister	
<u>P</u> ackage	Change can. serial #, can. weight, net weight, pkg flag	
<u>C</u> hange	Change the contents of a canister	
<u>R</u> eturn	Return to Micro-MAC main menu	
<u>L</u> eave	Leave Paradox and return to DOS	
<u>Z</u> DOS	Shell out to DOS. Type exit, then <CR> to return	

Figure 4 Mac Update Menu

3.1.1 Encapsulate

PRESS E to select Encapsulate -or- move the cursor up or down along the Update Operations Menu until the Encapsulate line is selected. Then press Enter (or $\downarrow$).

OBSERVE the beginning of the Encapsulation Input screen (Figure 5).

Figure 5

```
Encapsulation
Revision number is 162
By canister or location (C/L)-->
```

The Encapsulation function involves modifying the designation of a specified fuel canister in a K Basin. A canister can either be Normal (Designated by "N"), Partially Stuck ("P"), or Totally Stuck (designated by "A" for All Stuck).

NOTE: Canisters that will be designated as "Partially Stuck" must contain at least two (2) records (or pieces) because one or more piece(s) will be designated as "Stuck" while the rest of the pieces will be designated as "Loose". Any other canister can be designated as All Stuck or Normal.

Note: If the menu is selected by mistake, press Enter ($\downarrow$) and the system will return to the MAC Update Menu (Figure 4)

3.1.1.1 Select Canister to Encapsulate

The Canisters can be either selected directly by the canister number (the system then finds the canister's location) or by the location (the system identifies the canister by its number in the location designated).

NOTE: Have a recent Compact Map report in hand before selecting a canister to help identify occupied locations. Reports ordered by canister numbers may also be useful if a canister is selected directly.

3.1.1.1.1 Select Canister by Location to Encapsulate

FILL By canister or location (C/L) L ↵

When "L" is selected, the following screen appears (Figure 5A):

Figure 5A

```

Encapsulation
Revision number is 162
By canister or location (C/L)-->L
Enter canister location ----->

```

FILL Enter canister location W0805 ↵

If a valid canister location (e.g., W0805) is entered, the following screen displays (Figure 5B):

Figure 5B

```

Encapsulation
Revision number is 162
By canister or location (C/L)-->L
Enter canister location ----->W0805 OK!
Canister: 4569 <-----
Date encapsulated ----->6/03/93

```

OBSERVE "OK!" message.

OBSERVE display of canister number

If an invalid canister location is entered, the message "Error: empty" appears where the "OK" message appears in Figure 5B. The rest of the screen looks like Figure 5A (above). To proceed, reenter a valid canister location or press Enter (↵) to return to the MAC Update Menu (Figure 4).

3.1.1.1.2 Select Canister Directly to Encapsulate

FILL By canister or location (C/L) C

When "C" is selected, the following screen appears (Figure 5C):

Figure 5C
Example 0087

```

Encapsulation
Revision number is 162
By canister or location (C/L)-->C
Enter canister number ----->
    
```

Example 1234X

FILL Enter canister number 4569

If a valid canister number is entered (e.g., 4569) the following displays (Figure 5D).

Figure 5D
Example 0087

```

Encapsulation
Revision number is 162
By canister or location (C/L)-->C
Enter canister number ----->4569
Location: W0805<
Date encapsulated ----->6/03/93
    
```

OK!

OBSERVE "OK!" message.

OBSERVE display of location

If an invalid canister is entered, the message "Error: empty" appears where the "OK" message appears in Figure 5D. The rest of the screen looks like Figure 5C (above). To proceed, enter a valid canister or press Enter () to return to the MAC Update Menu (Figure 4).

3.1.1.2 Select Canister's new Status

NOTE: The following sections use displays for canisters selected by location. Refer to Figure 5D to see the screen for selecting by canister (on the lower half of the Encapsulation input block).

FILL Date encapsulated _____ (Default is today)

3.1.1.2.1 Partially Stuck Canister

FILL Is this a stuck can? (A/P/N) P ↵ (for Partially Stuck)

The following screen appears when P is selected. (Figure 5E, Location format)

Figure 5E

A = ALL stuck

Encapsulation	
Revision number is 162	
By canister or location (C/L)-->L	
Enter canister location ----->W0805	OK!
Canister: 4569	
Date encapsulated ----->6/03/93	
Is this a STUCK Can? (A/P/N)-->P	
Entries OK so far? (Y/N)-->Y	

P = PART stuck

FILL Entries OK thus far? (Y/N) Y ↵

NOTE: If N is entered, all of the above entries will be erased, and the selection process can start over.

NOTE: The next block of input pertains to "loose" material. It will not be requested if the canister was All Stuck (A). It will be requested if the canister was Partially Stuck (P) or was Normal (N).

FILL Enter loose material canister destination. _____ ↵ (Figure 5F)

Example 0087

Figure 5F

A = ALL stuck

Encapsulation	
Revision number is 162	
By canister or location (C/L)-->C	
Enter canister number ----->4569	OK!
Location: W0805	
Date encapsulated ----->6/03/93	
Is this a STUCK Can? (A/P/N)-->P	
Entries OK so far? (Y/N)-->Y	
Enter loose material can no. -->4568	OK!
Loose mtl canister destination->	

P = PART stuck
Proceeding

NOTE: The system will not permit the user to proceed until a unique canister number is entered. If your proposed canister number is not unique, you will be encouraged to add a suffix to the number (e.g., X, Y, or Z).

FILL Loose mtl canister destination W0103 ↵

NOTE: This is the destination of the repackaged "loose" material. The specific "loose" contents will be defined on the next screen. MAC will not proceed until an empty cubicle is selected.

Figure 5G

Example 0087

A = ALL stuck

```

Encapsulation
Revision number is 162
By canister or location (C/L)-->C
Enter canister number ----->4569 OK!
Location: W0805
Date encapsulated ----->6/03/93
Is this a STUCK Can? (A/P/N)-->P P = PART stuck
Entries OK so far? (Y/N)-->Y Proceeding
Enter loose material can no. -->4568 OK!
Loose mtl canister destination->W0103 OK!
Enter purged weight ----->

```

FILL Enter purged weight 500 ↵

FILL Enter net weight 480 ↵

Enter the weights and the following will appear (Figure 5H):

Figure 5H

Example 0087

A = ALL stuck

```

Encapsulation
Revision number is 162
By canister or location (C/L)-->C
Enter canister number ----->4569 OK!
Location: W0805
Date encapsulated ----->6/03/93
Is this a STUCK Can? (A/P/N)-->P P = PART stuck
Entries OK so far? (Y/N)-->Y Proceeding
Enter loose material can no. -->4568 OK!
Loose mtl canister destination->W0103 OK!
Enter purged weight ----->500
Enter net weight ----->480
Loose entries OK? (Y/N)-->Y

```

FILL Loose entries OK? Y ↵

NOTE: If N is entered, the "loose" entries will be erased, and they must be re-entered. In general, a blank entry aborts the entire input. The following will appear on the screen (Figure 5I).

Figure 5I

Example 0087

A = ALL stuck

Encapsulation	
Revision number is 162	
By canister or location (C/L)-->C	
Enter canister number ----->4569	OK!
Location: W0805	
Date encapsulated ----->6/03/93	
Is this a STUCK Can? (A/P/N)-->P	P = PART stuck
Entries OK so far? (Y/N)-->Y	Proceeding
Enter loose material can no. -->4568	OK!
Loose mtl canister destination->W0103	OK!
Enter purged weight ----->500	
Enter net weight ----->480	
Loose entries OK? (Y/N)-->Y	Proceeding
Stuck material canister no is ->0012S	

Query in process to retrieve data for canister: 4569 16:01:35

NOTE: At the bottom of the Encapsulation input block, a note will appear as follows:

Stuck material canister number is -> nnnnS

where: nnnn is a sequential number issued by the MAC system

The message on the bottom of the screen, below the Encapsulation input block, is replaced by the following:

Recording contents of table: Canister 16:01:52

Then the following appears in the same place:

Found canister table entry for 4569 16:01:56
Calling markstuck 16:01:56

Finally, the Encapsulation Distribution Table with loose/stuck toggle screen appears upon successful completion of the encapsulation input screen for a Partially stuck can (Figure 5I).

Press (Loose Material), <Ins> (Stuck), <F2> when done, <Esc> to abort
Note: Use Up arrow or Down arrow to move up or down.

M A T E R I A L

-- Fuel Characteristics --			----- Quantities -----				Stuck or Loose
Fuel Key	Model Type	Energy MWD's	Fuel Assem.	Outers	Inners	Other Pieces	
3858	BC	180.68	7	0	0	0	Stuck
3858	BE	382.07	7	0	0	0	Stuck

Use Delete key to toggle "Loose", or Insert key to toggle "Stuck"

Figure 6 Canister Contents Data Entry

MOVE CURSOR, using the up / down arrows to one or more "Loose" material lines and PRESS the <Delete> key.

OBSERVE that the designation changes from "Stuck" to "Loose".

MOVE CURSOR to a "Loose" line and press the <Insert> key.

OBSERVE that the designation changes from "Loose" to "Stuck".

FINALIZE the "Loose" and "Stuck" designations.

When F2 is pressed, one of the following messages will appear on screen when one is moving loose material into a canister in one location and encapsulating the rest in its original location.

```

Editing location table to add information 10:44:40
Deleted canister 4569 which was in cubicle W0805 10:44:44
Editing canister table to add information 10:44:46
Deleted old entry for canister 4569 10:44:49
Updating material table 10:44:54
Adding new records to table Daily 10:45:02

```

The beginning of the Encapsulation Input screen (Figure 5) will finally appear on the screen.

3.1.1.2.2 All Stuck Canister

FILL Is this a stuck can? (A/P/N) **A** (for All Stuck)

FILL Entries OK thus far? (Y/N) **Y**

The following screen appears in the location format (Figure 5J):

Figure 5J
Example 0087
A = ALL stuck

Encapsulation	
Revision number is	162
By canister or location (C/L)-->	C
Enter canister number ----->	4569
Location:	W0805
Date encapsulated ----->	6/03/93
Is this a STUCK Can? (A/P/N)-->	A
Entries OK so far? (Y/N)-->	Y
Stuck material canister no is ->	0011S

OK!
P = PART stuck
Proceeding

Query in process to retrieve data for canister: 4569 15:45:15

NOTE: At the bottom of the encapsulation input block, the following note will appear:

Stuck material canister number is -> nnnnS

where: nnnn is a sequential number issued by the MAC system

The message on the bottom of the screen is replaced by the following:

Recording contents of table: Canister 15:45:32

Then the following message appears:

Found canister table entry for 4569 15:45:35
Calling markstuck 15:45:35

NOTE: A new stuck canister number will be issued and shown at the bottom of the encapsulation input screen.

NOTE: Because the canister is totally stuck, the user will not be shown an encapsulation distribution table. However, a table will be displayed, showing the contents of the stuck canister.

Press <F2> when done, <Esc> to abort
Note: Use Up arrow or Down arrow to move up or down.
M A T E R I A L

-- Fuel Characteristics --			----- Quantities -----			
Fuel Key	Model Type	Energy MWD's	Fuel Assem.	Outers	Inners	Other Pieces
3858	BC	180.68	7	0	0	0
3858	BE	382.07	7	0	0	0

Canister contents

Figure 7 Canister Contents

The only choices are to abort or to confirm that everything is stuck, which will begin the encapsulation process. If F2 is pressed, a status message will appear followed by the beginning of the Encapsulation Input screen (Figure 5).

3.1.1.2.3 Normal Canister

FILL Is this a stuck can? (A/P/N) N ↵ (for Normal or NO)

This screen appears when N selected. (Figure 5K, Location format)

Figure 5K

A = ALL stuck

```

Encapsulation
Revision number is 162
By canister or location (C/L)-->L
Enter canister location ----->W0805 OK!
Canister: 4569
Date encapsulated ----->6/03/93
Is this a STUCK Can? (A/P/N)-->N P = PART stuck
Entries OK so far? (Y/N)-->Y

```

FILL Entries OK thus far? (Y/N) Y ↵

NOTE: If N is entered, all of the above entries will be erased so that the selection process can start over.

NOTE: The next block of input pertains to "loose" material (Figure 5L).

FILL Enter loose material canister destination. E0805 ↵

Example 0087
Figure 5L

A = ALL stuck

```

Encapsulation
Revision number is 162
By canister or location (C/L)-->C
Enter canister number ----->2345E OK!
Location: W0805
Date encapsulated ----->6/03/93
Is this a STUCK Can? (A/P/N)-->N P = PART stuck
Entries OK so far? (Y/N)-->Y Proceeding
Enter loose material can no. -->9991 OK!
Loose mtl canister destination->

```

NOTE: The system will not permit entry to proceed until a unique canister number is entered. If your proposed canister number is not unique, you will be asked to add a suffix (X, Y, or Z) to the number.

FILL Loose mtl canister destination E0805 ↵

NOTE: If no "loose" material is stuck in the original cubicle, the material can be repackaged in the same cubicle into a different container. The specific "loose" contents will be defined on the next screen (Figure 5M).

Figure 5M
Example 0087

A = ALL stuck

```

Encapsulation
Revision number is 162
By canister or location (C/L)-->C
Enter canister number ----->2345E OK!
Location: E0805
Date encapsulated ----->6/03/93
Is this a STUCK Can? (A/P/N)-->N P = PART stuck
Entries OK so far? (Y/N)-->Y Proceeding
Enter loose material can no. -->2345E OK!
Loose mtl canister destination->E0805 OK!
Enter purged weight ----->

```

FILL Enter purged weight 500 ↵

FILL Enter net weight 480 ↵

The following screen will appear (Figure 5N):

Figure 5N
Example 0087

A = ALL stuck

```

Encapsulation
Revision number is 162
By canister or location (C/L)-->C
Enter canister number ----->4569 OK!
Location: W0805
Date encapsulated ----->6/03/93
Is this a STUCK Can? (A/P/N)-->N P = PART stuck
Entries OK so far? (Y/N)-->Y Proceeding
Enter loose material can no. -->4569X OK!
Loose mtl canister destination->W0805 OK!
Enter purged weight ----->500
Enter net weight ----->480
Loose entries OK? (Y/N)-->Y

```

FILL Loose entries OK? Y ↵

NOTE: If N is answered, the "loose" entries will be erased, and you must re-enter them. In general, a blank entry aborts the entire input.

OBSERVE A table will be displayed, showing the contents of the canister. This table may be edited (see Figure 7).

After viewing or Editing the table, press F2 to process the changes. Either the material will be moved to another canister in the new location specified or the material will be repackaged in the current cubicle. The beginning of the Encapsulation Input screen (Figure 5) will finally appear on the screen.

3.1.1.3 CHECK the results Using Help / All (also see Section 3.4):

By using Help / All, the following items can be checked:

- (1) Verify that the stuck can (with number nnnS) returned to its original location.
- (2) Verify that the loose can with new number is stored in the specified location.
- (3) Verify the purged and net weights for the loose material using the Canister table.
- (4) Verify the distribution of the "Stuck" and "Loose" materials, using the Material table.

3.1.2 BasintoBasin (Basin to Basin Canister Move)

PRESS B to select BasintoBasin -or-
Move the cursor Up or Down along the Update Operations Menu until the BasintoBasin line is selected. Then PRESS Enter (or ↵).

OBSERVE the beginning of the Basin to Basin Movement Input screen (Figure 8).

Figure 8

The Basin to Basin function involves moving a canister of material from a location in either K-East or K-West basin (usually) to a location within a different basin.

Note: If the menu is selected by mistake, then press Enter (↵) and the system will return to the MAC Update Menu (Figure 4).

3.1.2.1 Select Canister for Basin to Basin Move

The canisters can be selected directly by the canister number (the system then finds the canister's location) or by the canister location (the system identifies the canister in the location designated).

NOTE: Have a recent Compact Map report in hand before selecting a canister to help identify occupied locations. Reports ordered by canister numbers may also be useful if a canister is selected directly.

3.1.2.1.1 Select Canister by Location for Basin to Basin Move

FILL By canister or location (C/L) L ↵FILL Enter Location E0103 ↵

If a valid canister number (e.g., 0000) is within the location, the following screen displays (Figure 8A):

Figure 8A

```

Basin to Basin Move
Revision number is 162
By canister or location (C/L)-->L
Enter canister location ----->E0103 OK!
Canister: 0000
Enter NEW location ----->
  
```

3.1.2.1.2 Select Canister Directly for Basin to Basin Move

FILL By canister or location (C/L) C ↵FILL Enter canister number 0000 ↵

If a valid canister number (e.g., 0000) is found in a valid location, the following screen displays (Figure 8B):

Figure 8B
Example 0087

```

Basin to Basin Move
Revision number is 162
By canister or location (C/L)-->C
Enter canister number ----->0000 OK!
Location: E0103
Enter NEW location ----->
  
```

FILL Enter NEW location W0103 ↵

NOTE: Remember this location must be different than the originating basin to make a valid move.

Figure 8C
Example 0087

```

Basin to Basin Move
Revision number is 162
By canister or location (C/L)-->C
Enter canister number ----->0000 OK!
Location: E0103
Enter NEW location ----->W0103
  
```

FILL Date canister moved _____ ↵ (Default is today)

FILL Entries OK? Y ↵

After filling in the movement date and confirming the transaction, the move is processed and the following screen appears (Figure 8D).

Figure 8D
Example 0087

```

Basin to Basin Move
Revision number is 162
By canister or location (C/L)-->C
Enter canister number ----->0000 OK!
Location: E0103
Enter NEW location ----->W0103 OK!
Date canister moved --->6/04/93
Entries OK? (Y/N) ---->Y
  
```

The following messages appear on the bottom of the screen while the movement is taking place.

Checking destination at W0103 12:44:47

Updating the location table 12:45:04
Adding updates to table: hist-loc 12:45:07

The beginning of the Basin to Basin Move Input screen (Figure 8) will finally appear on the screen.

3.1.3 InBasin (Canister Movement within a Basin)

PRESS I to select InBasin -or-
Move the cursor up or down along the Update Operations Menu until the InBasin line is selected. Then PRESS Enter (or $\downarrow$).

OBSERVE the beginning of the In Basin Movement Input screen (Figure 9).

Figure 9

```

In Basin Move
Revision number is 162
By canister or location (C/L)-->
  
```

The In Basin function involves moving a canister of material from a location within either K-East or K-West basin (usually) to a different location within the same basin.

Note: If the menu is selected by mistake, then PRESS Enter ($\downarrow$) and the system will return to the MAC Update Menu (Figure 4).

3.1.3.1 Select Canister for a move within a Basin

The canisters can be selected directly by the canister number (the system then finds the canister's location) or by the canister location (the system identifies the canister in the location designated).

NOTE: Have a recent Compact Map report in hand before selecting a canister to help identify occupied locations. Reports ordered by canister numbers may also be useful if a canister is selected directly.

3.1.3.1.1 Select Canister by Location for a move within a Basin

FILL By canister or location (C/L) L ↵

FILL Enter Location E0103 ↵

If a valid canister number (e.g., 0000) is within the location, the following displays (Figure 9A):

Figure 9A

```

In Basin Move
Revision number is 162
By canister or location (C/L)-->L
Enter canister location ----->E0103 OK!
Canister: 0000
Enter NEW location ----->
  
```

3.1.3.1.2 Select Canister Directly for a move within a Basin

FILL By canister or location (C/L) C ↵

FILL Enter canister number 0000 ↵

If a valid canister number (e.g., 0000) is found in a valid location, the following displays (Figure 9B):

Figure 9B

Example 0087

```

In Basin Move
Revision number is 162
By canister or location (C/L)-->C
Enter canister number ----->0000 OK!
Location: E0103
Enter NEW location ----->
  
```

FILL Enter NEW location W0103 ↵

NOTE: Remember this location must within the originating basin.

Figure 9C

Example 0087

```

In Basin Move
Revision number is 162
By canister or location (C/L)-->C
Enter canister number ----->0000 OK!
Location: E0103
Enter NEW location ----->E0100
    
```

NOTE: If an invalid location is selected, a message "Error Occupied" will appear to the right of the new location line.

FILL Date canister moved _____ ␣ (Default is today)

FILL Entries OK? Y ␣

After filling in the movement date and approving the transaction, the move is processed and the following screen appears (Figure 9D).

Figure 9D

Example 0087

```

In Basin Move
Revision number is 162
By canister or location (C/L)-->C
Enter canister number ----->0000 OK!
Location: E0103
Enter NEW location ----->E0100 OK!
Date canister moved --->6/04/93
Entries OK? (Y/N) ----->Y
    
```

The following messages appear on the bottom of the screen while the movement is taking place.

```

Checking destination at E0100 12:44:47
Updating the location table 12:45:04
Adding updates to table: hist-loc 12:45:07
    
```

The beginning of the In Basin Move Input screen (Figure 9) will finally appear on the screen.

3.1.4 Add (Add Material To a Canister)

PRESS A to select Add -or-
Move the cursor Up or Down along the Update Operations Menu until the Add line is highlighted. Press Enter (or ↵).

The user may OBSERVE a prompt asking if a new revision number is required.

FILL in N if a new revision is not required, or Y if one is. The computer will automatically assign a new revision number.

OBSERVE the beginning of the Add to Contents Input screen (Figure 10).

Figure 10

```
** Add to Contents **
Revision number is 162
By canister or location (C/L)-->
```

The add function involves adding material to a canister.

Note: If the menu is selected by mistake, press Enter (↵) and the system will return to the MAC Update Menu (Figure 4).

3.1.4.1 Select Canister to Receive Material

The canisters can be selected directly by the canister number (the system then finds the canister's location) or by the canister location (the system identifies the canister in the location designated).

NOTE: Have a recent Compact Map report in hand before selecting a canister to help identify occupied locations. Reports ordered by canister numbers may also be useful if a canister is selected directly.

3.1.4.1.1 Select Target Canister by Location

FILL By canister or location (C/L) L ↵FILL Enter Location E0103 ↵

If a valid canister number (e.g., 0000) is within the location, the following screen displays (Figure 10A):

Figure 10A

```

** Add to Contents **
Revision number is 162
By canister or location (C/L)-->L
Enter canister location ----->E0103 OK!
Canister: 0000

```

3.1.4.1.2 Select Target Canister Directly

FILL By canister or location (C/L) C ↵FILL Enter canister number 0000 ↵

If a valid canister number (e.g., 0000) is found in a valid location, the following screen displays (Figure 10B):

Figure 10B

Example 0087

```

** Add to Contents **
Revision number is 162
By canister or location (C/L)-->C
Enter canister number ----->0000 OK!
Location: E0103

```

FILL Date material added _____ ↵ (Default is today)

FILL Entries OK? Y ↵

After filling in the movement date and approving the transaction, the add process is set up and the following appears on the screen (Figure 11).

Query in process to retrieve data for canister: 0000 13:39:13
Beginning edit for location: W0100 13:39:28

Press <F2> when finished editing, <Esc> to abort
Note: Ctrl-Backspace will erase a field. Use Enter or arrows to move around.

LOCATION		CANISTER		
Can #	Location	Purged Wt	Net Wt	Pkg
0000	W0100	500	444	P

M A T E R I A L

-- Fuel Characteristics --			----- Quantities -----			
Fuel Key	Model Type	Energy MWD's	Fuel Assem.	Outers	Inners	Other Pieces
3858	BC	180.68	7	0	0	0
3858	BE	382.07	7	0	0	0

Please edit fuel characteristics and quantities as needed

Figure 11 Edit Screen for Adding Material

This function allows the fuel characteristics and quantities to be edited as required. Once the fields are edited, press F2 to process the changes. Please note that one cannot edit either of the top two tables.

Finally the beginning of the Add to Contents Input screen (Figure 10) will appear on the screen.

3.1.5 Delete (Remove a Canister Record)

PRESS D to select Delete -or-
Move the cursor Up or Down along the Update Operations Menu until the Delete line is selected. Press Enter (or $\downarrow$).

OBSERVE the beginning of the Delete Records Input screen (Figure 12).

Figure 12

```

*** Delete Records **
Revision number is 162
By canister or location (C/L)-->
  
```

The delete function involves deleting material from a canister.

NOTE: If the menu is selected by mistake, then press Enter ($\downarrow$) and the system will return to the MAC Update Menu (Figure 4).

3.1.5.1 Select Canister to Delete

The canisters can be selected directly by the canister number (the system then finds the canister's location) or by the canister location (the system identifies the canister in the location designated).

NOTE: Have a recent Compact Map report in hand before selecting a canister to help identify occupied locations. Reports ordered by canister numbers may also be useful if a canister is selected directly.

3.1.5.1.1 Select Canister by Location to Delete

FILL By canister or location (C/L) $\downarrow$

FILL Enter Location E0103 $\downarrow$

If a valid canister number (e.g., 0000) is within the location, the following screen displays (Figure 12A):

Figure 12A

```

*** Delete Records **
Revision number is 162
By canister or location (C/L)-->L
Enter canister location ----->E0103 OK!
Canister: 0000
  
```

3.1.5.1.2 Select Canister Directly to Delete

FILL By canister or location (C/L) C ↵FILL Enter canister number 0000 ↵

If a valid canister number (e.g., 0000) is found in a valid location, the following screen displays (Figure 12B):

Figure 12B

Example 0087

```

*** Delete Records ***
Revision number is 162
By canister or location (C/L)-->C
Enter canister number ----->0000 OK!
Location: E0103

```

FILL Date material deleted _____ ↵ (Default is today)

FILL Entries OK? Y ↵

After filling in the movement date and approving the transaction, the delete process is set up and the following screen appears (Figure 12C).

Figure 12C

Example 0087

```

*** Delete Records ***
Revision number is 162
By canister or location (C/L)-->C
Enter canister number ----->0000 OK!
Location: E0103

Date material deleted --->6/04/93
Entries OK? (Y/N) ----->Y

```

Messages will appear on the bottom of the screen indicating that the record selected is being deleted. The Delete Records Input screen (Figure 12) will finally appear on the screen.

3.1.6 Package (Package Material In a Canister)

PRESS P to select Package -or-
Move the cursor Up or Down along the Update Operations Menu until the Package line is selected. Press Enter (or $\leftarrow$).

OBSERVE the beginning of the Package Canister Input screen (Figure 13).

Figure 13

```
Canister-Packaging
Revision number is 162
By canister or location (C/L)-->
```

The packaging function involves packaging material in a canister.

Note: If the menu is selected by mistake, then PRESS Enter ($\leftarrow$) and the system will return to the MAC Update Menu (Figure 4).

3.1.6.1 Select Canister to Repackage Material In

The canisters can be selected directly by the canister number (the system then finds the canister's location) or by the canister location (the system identifies the canister in the location designated).

NOTE: Have a recent Compact Map report in hand before selecting a canister to help identify occupied locations. Reports ordered by canister numbers may also be useful if a canister is selected directly.

3.1.6.1.1 Select Canister by Location to Repackage Material In

FILL By canister or location (C/L) L ↵FILL Enter Location E0103 ↵

If a valid canister number (e.g., 0000) is within the location, the following screen displays (Figure 13A):

Figure 13A

```

Canister-Packaging
Revision number is 162
By canister or location (C/L)-->L
Enter canister location ----->E0103 OK!
Canister: 0000
  
```

3.1.6.1.2 Select Canister Directly to Repackage Material In

FILL By canister or location (C/L) C ↵FILL Enter canister number 0000 ↵

If a valid canister number (e.g., 0000) is found in a valid location, the following screen displays (Figure 13B):

Figure 13B

Example 0087

```

Canister-Packaging
Revision number is 162
By canister or location (C/L)-->C
Enter canister number ----->0000 OK!
Location: E0103
  
```

FILL Date material added _____ ↵ (Default is today)

FILL Entries OK? Y ↵

After filling in the movement date and approving the transaction, the repackaging process is set up and the following appears on the screen (Figure 13C).

Figure 13C

Example 0087

```

Canister-Packaging
Revision number is 162
By canister or location (C/L)-->C
Enter canister number ----->0000 OK!
Location: E0103

Date material added --->6/04/93
Entries OK? (Y/N) ----->Y
  
```

The following messages appear on the bottom of the screen while the repackaging process is being set up.

Query in process to retrieve data for canister: 0000 13:39:13
Beginning edit for location:W0100 13:39:28

Then the Repackaging Material screen will be displayed (Figure 14).

Press <F2> when finished editing (top two tables), <Esc> to abort
Note: Use <F3> to change tables. Use Enter or arrows to change fields.

LOCATION		CANISTER		
Can #	Location	Purged Wt	Net Wt	Pkg
0000	W0100	500	444	P

M A T E R I A L

-- Fuel Characteristics --			----- Quantities -----			
Fuel Key	Model Type	Energy MWD's	Fuel Assem.	Outers	Inners	Other Pieces
3858	BC	180.68	7	0	0	0
3858	BE	382.07	7	0	0	0

Please edit fuel characteristics and quantities as needed

Figure 14 Edit Screen for Repackaging Material

This function allows the user to edit the location and canister tables. Once the fields are edited, press F2 to process the changes. Please note that one can edit the top two tables only.

Finally the beginning of the Package Canister Input screen (Figure 13) will appear on the screen.

3.1.7 Change (Change Material In a Canister)

PRESS **C** to select Change -or-
Move the cursor Up or Down along the Update Operations Menu until the Change line is selected. Then PRESS Enter (or **↵**).

The user may OBSERVE a prompt asking if a new revision number is required.

FILL in **N** or **Y** as appropriate. If Y is selected, the computer will automatically assign a new revision number.

OBSERVE the beginning of the Change Contents Input screen (Figure 15).

Figure 15

```

** Change Contents **
Revision number is 162
By canister or location (C/L)-->
    
```

The change function involves changing material in a canister.

NOTE: If the menu is selected by mistake, then press Enter (**↵**) and the system will return to the MAC Update Menu (Figure 4).

3.1.7.1 Select Target Canister

The canisters can be selected directly by the canister number (the system then finds the canister's location) or by the canister location (the system identifies the canister in the location designated).

NOTE: Have a recent Compact Map report in hand before selecting a canister to help identify occupied locations. Reports ordered by canister numbers may also be useful if a canister is selected directly.

3.1.7.1.1 Select Target Canister by Location

FILL By canister or location (C/L) L ↵FILL Enter Location E0103 ↵

If a valid canister number (e.g., 0000) is within the location, the following screen displays (Figure 15A):

Figure 15A

```

** Change Contents **
Revision number is 162
By canister or location (C/L)-->L
Enter canister location ----->E0103 OK!
Canister: 0000
  
```

3.1.7.1.2 Select Target Canister Directly

FILL By canister or location (C/L) C ↵FILL Enter canister number 0000 ↵

If a valid canister number (e.g., 0000) is found in a valid location, the following screen displays (Figure 15B):

Figure 15B

Example 0087

```

** Change Contents **
Revision number is 162
By canister or location (C/L)-->C
Enter canister number ----->0000 OK!
Location: E0103
  
```

FILL Date material added _____ ↵ (Default is today)

FILL Entries OK? Y ↵

After filling in the movement date and approving the transaction, the change process is set up and the following appears on the screen (Figure 15C).

Figure 15C

Example 0087

```

** Change Contents **
Revision number is 162
By canister or location (C/L)-->C
Enter canister number ----->0000 OK!
Location: E0103

Date material added ---->6/04/93
Entries OK? (Y/N) ----->Y
  
```


The following messages appear on the bottom of the screen while the change process is being set up.

Query in process to retrieve data for canister: 0000 13:39:13
Beginning edit for location:W0100 13:39:28

Press <F2> when finished editing, <Esc> to abort

Note: Ctrl-Backspace will erase a field. Use Enter or arrows to move around.

LOCATION		CANISTER		
Can #	Location	Purged Wt	Net Wt	Pkg
0000	W0100	500	444	P

M A T E R I A L

-- Fuel Characteristics --			----- Quantities -----			
Fuel Key	Model Type	Energy MWD's	Fuel Assem.	Outers	Inners	Other Pieces
3858	BC	180.68	7	0	0	0
3858	BE	382.07	7	0	0	0

Please edit fuel characteristics and quantities as needed

Figure 16 Edit Screen for Changing Material

This function allows the fuel characteristics and quantities to be edited as required. Once the fields are edited, press F2 to process the changes. Please note that one cannot edit either of the top two tables.

Finally the beginning of the Change Contents Input screen (Figure 15) will appear on the screen.

3.2 Report Functions

PRESS R to select Report -or-
Move the cursor Up or Down along the MAC Main Menu until the Report line is selected. Press Enter (or $\leftarrow$).

The MAC Reports menu appears on the screen (Figure 17). Each available report is described in a separate subsection below.

To select, Press first character or <Enter>. To see explanation, highlight the appropriate selection using the cursor movement keys.

CHOOSE:	Menu: macreprt	Directory: g:\mac\
<u>D</u> aily <u>C</u> ompact <u>W</u> orkSheets <u>H</u> istory <u>M</u> ap <u>K</u> eyFileSum <u>S</u> toBucSum <u>P</u> ackage <u>E</u> mpy <u>U</u> npack <u>R</u> eturn <u>L</u> ease <u>Z</u> DOS	Daily Encapsulation Report Compacted Cubicle Map Work Sheets for Shipping Material, etc History: Material Moves, Additions, Deletions, Changes Basin Storage Map Key File Summary Report Storage and Bucket Summary Report Canister no., location, weights, key date, pkg flag Report showing empty cubicles Unpackaged Materials Report Return to Micro-MAC main menu Leave Paradox and return to DOS Shell out to DOS. Type exit, then <CR> to return	

Figure 17 MAC Reports Menu

Examples of each report are shown in Appendix A.

3.2.1 Daily Report

PRESS D to select Daily Report -or-
Move the cursor Up or Down along the Report Generation Menu until the Daily line is selected. Press Enter (or $\downarrow$).

The report range menu appears on the screen and appears shown below (Figure 18). Each report has various options. Any report can be separated by page.

To select, Press first character or <Enter>. To see explanation, highlight the appropriate selection using the cursor movement keys.

CHOOSE:	Menu: macrange	Directory: g:\mac\
Full	Full Report	
Pages	Report limited to a specified range of page numbers	
Key Dates	For SBS, Basin Maps, Worksheets, Key File Summary	
Dates	Range of action dates. For encapsulation, history	
Return	Return to Micro-MAC main menu	
Leave	Leave Paradox and return to DOS	
ZDOS	Shell out to DOS, Type exit then <CR> to return	

Figure 18 Report Range Menu

PRESS F to select a Full Report -or-
PRESS P to select a Report by Selected Pages -or-
PRESS D to select a Report by Dates -or-
Move the cursor Up or Down along the Report Generation Menu until the Full, Pages, or Dates line is selected. Press Enter (or $\downarrow$).

If F is selected, the report is immediately output.
If P is selected, the following appears on the screen (Figure 18A):

Figure 18A

```

Enter starting page -->
Enter ending page -->
  
```

If D is selected, then the following appears on the screen (Figure 18B).

Figure 18B

```

Enter starting date -->
Enter ending date -->

Enter blank to return
  
```

SELECT a Date range that will include the date(s) desired.
The report will be output based on the date range selected.

3.2.2 Compact Report

PRESS C to select Compact Report -or-
Move the cursor Up or Down along the Report Generation Menu until the
Compact line is selected. Press Enter (or $\leftarrow$ J).

The compacted cubicle map report, which contains a row/column map format layout of the K-East and K-West basin cubicles, is generated. Each cubicle's loading is designated by 1 digit. A one digit number denoting the number of master file entries for that cubicle appears in the slot. If the slot represents an invalid cubicle, an asterisk (*) appears in the slot.

3.2.3 Worksheets Report

PRESS W to select Worksheets Report -or-
Move the cursor Up or Down along the Report Generation Menu until the Worksheets line is selected. Press Enter (or $\downarrow$).

The report worksheet menu appears on the screen (Figure 19).

To select, Press first character or <Enter>. To see explanation, highlight the appropriate selection using the cursor movement keys.

CHOOSE:	Menu: macwork	Directory: g:\mac\
Shipping	Shipping worksheets	
Packaging	Packaging worksheets	
Return	Return to Micro-MAC main menu	
ZDOS	Shell out to DOS. Type exit, then <CR> to return	
Leave	Leave Paradox and return to DOS	

Figure 19 Worksheet Selection Menu

PRESS S to select Shipping Worksheet -or-
PRESS P to select Packaging Worksheet -or-
Move the cursor Up or Down along the Report Generation Menu until the Shipping or Packaging line is selected. Press Enter (or $\downarrow$).

The basin selection menu appears (Figure 20).

To select, Press first character or <Enter>. To see explanation, highlight the appropriate selection using the cursor movement keys.

CHOOSE:	Menu: macbasin	Directory: g:\mac\
East Basin	K area East material storage basin	
West Basin	K area West material storage basin	
Return	Return to Micro-MAC main menu	
Leave	Leave Paradox and return to DOS	
ZDOS	Shell out to DOS. Type exit, then <CR> to return	

Figure 20 Worksheet Basin Selection Menu

PRESS E to select K East Basin -or-
 PRESS W to select K West Basin -or-
 Move the cursor Up or Down along the Report Generation Menu until the East Basin, or West Basin line is selected. Press Enter (or $\downarrow$).

The report range menu appears on the screen and appears as follows (Figure 21).

To select, Press first character or <Enter>. To see explanation, highlight the appropriate selection using the cursor movement keys.

<div>CHOOSE:</div> <div>Full</div> <div>Pages</div> <div>Key Dates</div> <div>Dates</div> <div>Return</div> <div>Leave</div> <div>ZDOS</div>	<div>Menu: macrange Directory: g:\mac\</div> <div>Full Report</div> <div>Report limited to a specified range of page numbers</div> <div>For SBS, Basin Maps, Worksheets, Key File Summary</div> <div>Range of action dates. For encapsulation, history</div> <div>Return to Micro-MAC main menu</div> <div>Leave Paradox and return to DOS</div> <div>Shell out to DOS, Type exit then <CR> to return</div>
--	--

Figure 21 Worksheet Report Range Menu

PRESS F to select a Full Report -or-
 PRESS P to select a Report by Selected Pages -or-
 PRESS K to select a Report by Key Dates -or-
 Move the cursor Up or Down along the Report Generation Menu until the Full, Pages, or Key Dates line is selected. Then PRESS Enter (or $\downarrow$).

Figure 22 will appear on the screen.

NOTE: The destination line appears only when shipping is selected.

Note: The Shipping Worksheet (Figure 22) calls out material by key date, enrichment, and destination, with spaces provided for manual entries of Shift, Date, Car, Well, and Load. The packaging worksheet calls out material by key date and enrichment, with spaces provided for manual entries of Shift and Date.

Figure 22

0.7,0.9,1.1,1.2,2,ALL

E or W

Key Date + Subkey	-->
Enrichment	-->
Destination	-->

A blank entry will cause return to previous menu

NOTE: A key date is the HAPO date a fuel element was discharged from a process tube from N reactor.

The following HAPO date choices are available, as this version is published, for either basin:

0001 , 0201D, 0259B, 0259D, 0294B, 0294C, 0294D, 0350D, 0385B, 0385D, 0456B, 0456D, 0576B, 0602B, 0602C, 0602D, 0679B, 0679D, 0742B, 0742C, 0742D, 0764 , 0770B, 0770D, 0832B, 0832C, 0832D, 0982B, 0982D, 1036B, 1036C, 1036D, 1109B, 1109D, 1183B, 1183C, 1183D, 1372B, 1372D, 1449B, 1449D, 1540B, 1540D, 1733B, 1806B, 1806D, 1897B, 1897D, 1979B, 1979D, 2127B, 2127C, 2127D, 2201B, 2201D, 2240B, 2240C, 2285B, 2285C, 2285D, 2480B, 2480C, 2480D, 2565B, 2565C, 2565D, 2639 , 2639B, 2639C, 2639D, 2852 , 2852B, 3015 , 3016 , 3371 , 3649 , 3650 , 3685 , 4065 , 4355B, 4355C, 4355D, 4356D, 4722 , 5204 , 5240 , 5316 , 5399 , 5444 , 5451 , 5455 , 5457 , 5458 , 5460 , 5461 , or 9621 .

Note: A Subkey is the Fuel segregation code that designates fuel enrichment for the fuel (e.g., A, B, C, D)

SELECT a Key Date and Subkey as listed.

SELECT an enrichment. Type in one of the numbers or letters that is suggested at the left of the screen (Figure 22). The system will accept no other entries.

If shipping, SELECT the destination basin (E or W).

After the above information is entered, the information for the report is generated. If no instances of the selected combination are found, a message stating this is displayed.

After the generation is completed and F was previously selected, the report is output immediately.

If P was previously selected, the following appears on the screen (Figure 22A):

Figure 22A

```

Enter starting page -->
Enter ending page -->
  
```

FILL in the starting and ending pages. If the number selected for the ending page is greater than the number of pages in the report, then the last page of the report output will include the last page selected for that report.

If K is selected, then the following appears on the screen (Figure 22B).

Figure 22B

```

Enter starting key -->
Enter ending key -->
  
```

The original key input in the previous screen needs to be entered as both the starting and ending keys.

Based on the information entered, the computer will generate the report.

3.2.4 History Report

PRESS H to select History Report -or-
Move the cursor Up or Down along the Report Generation Menu until the History line is selected. Press Enter (or $\downarrow$).

Change reports consist of tables showing all the information entered for each changed record pertaining to the material in a given location.
Move reports consist of tables showing all the information entered for each transfer of material.

The following menu is displayed (Figure 23):

To select, Press first character or <Enter>. To see explanation, highlight the appropriate selection using the cursor movement keys.

CHOOSE:	Menu: machist	Directory: g:\mac\
<u>L</u> ocation	History of Canister Locations	
<u>C</u> anister	History of Canister Gross & Net Weight, Packaging Flag	
<u>M</u> aterial	History of Canister Material Contents	
<u>R</u> eturn	Return to Micro-MAC main menu	
<u>L</u> eave	Leave Paradox and return to DOS	
<u>Z</u> DOS	Shell out to DOS. Type exit, then <CR> to return	

Figure 23 History report menu

PRESS **L** to select a History Report by Location -or-
 PRESS **C** to select a History Report by Canister -or-
 PRESS **M** to select a History Report by Material -or-
 Move the cursor Up or Down along the Report Generation Menu until the
Location, Canister, or Material line is selected.
 Press Enter (or **↵**).

The report range menu appears on the screen (Figure 24):

To select, Press first character or <Enter>. To see explanation,
 highlight the appropriate selection using the cursor movement keys.

CHOOSE:	Menu: macrange	Directory: g:\mac\
Full	Full Report	
Pages	Report limited to a specified range of page numbers	
Key Dates	For SBS, Basin Maps, Worksheets, Key File Summary	
Dates	Range of action dates. For encapsulation, history	
Return	Return to Micro-MAC main menu	
Leave	Leave Paradox and return to DOS	
ZDOS	Shell out to DOS, Type exit then <CR> to return	

Figure 24 History Report Range Menu

PRESS **F** to select a Full Report -or-
 PRESS **P** to select a Report by Selected Pages -or-
 PRESS **D** to select a Report by Dates -or-
 Move the cursor Up or Down along the Report Generation Menu until the
Full, Pages, or Dates line is selected. Press Enter (or **↵**).

If **F** is selected, the report is output immediately.

If **P** is selected, the following appears on the screen (Figure 25):

Figure 24A

```

Enter starting page -->
Enter ending page -->
    
```

If **D** is selected, the following appears on the screen (Figure 24B):

Figure 24B

```

Enter starting date -->
Enter ending date -->
    
```

Enter blank to return

SELECT a **Date** range that includes the date(s) desired.
 The report will be output based on the date range selected.

3.2.5 Map Report

PRESS **M** to select Map Report -or-
Move the cursor Up or Down along the Report Generation Menu until the Map line is selected. Press Enter (or **↵**).

The basin selection menu then appears (Figure 25).

NOTE: This menu sequence also appears when the Key File Summary, Storage Bucket Summary, or Package is selected.

To select, Press first character or <Enter>. To see explanation, highlight the appropriate selection using the cursor movement keys.

<div>CHOOSE:</div> <div>East Basin</div> <div>West Basin</div> <div>Return</div> <div>Leave</div> <div>ZDOS</div>	<div>Menu: mapbasin</div> <div>Directory: g:\mac\</div> <div>K area East material storage basin</div> <div>K area West material storage basin</div> <div>Return to Micro-MAC main menu</div> <div>Leave Paradox and return to DOS</div> <div>Shell out to DOS. Type exit, then <CR> to return</div>
---	---

Figure 25 Map Basin Selection Menu

PRESS **E** to select K East Basin -or-
PRESS **W** to select K West Basin -or-
Move the cursor Up or Down along the Report Generation Menu until the East Basin, or West Basin line is selected. Press Enter (or **↵**).

The report range menu appears on the screen (Figure 26):

To select, Press first character or <Enter>. To see explanation, highlight the appropriate selection using the cursor movement keys.

<div>CHOOSE:</div> <div>Full</div> <div>Pages</div> <div>Key Dates</div> <div>Dates</div> <div>Return</div> <div>Leave</div> <div>ZDOS</div>	<div>Menu: macrange</div> <div>Directory: g:\mac\</div> <div>Full Report</div> <div>Report limited to a specified range of page numbers</div> <div>For SBS, Basin Maps, Worksheets, Key File Summary</div> <div>Range of action dates. For encapsulation, history</div> <div>Return to Micro-MAC main menu</div> <div>Leave Paradox and return to DOS</div> <div>Shell out to DOS, Type exit then <CR> to return</div>
--	--

Figure 26 Map Report Range Menu

PRESS **F** to select a Full Report -or-
PRESS **P** to select a Report by Selected Pages -or-
PRESS **D** to select a Report by Dates -or-
Move the cursor Up or Down along the Report Generation Menu until the Full, Pages, or Dates line is selected. Then PRESS Enter (or **↵**).

If F is selected, the report is output immediately.

If P is selected, the following appears on the screen (Figure 26A):

Figure 26A

```
Enter starting page -->
Enter ending page -->
```

If D is selected, then the following appears on the screen (Figure 26B).

Figure 26B

```
Enter starting date -->
Enter ending date -->
```

Enter blank to return

SELECT a Date range that includes the date(s) desired.

The report will be output based on the date range selected.

3.2.6 Key File Summary Report

PRESS K to select Key File Summary Report -or-
Move the cursor Up or Down along the Report Generation Menu until the KeyFileSum line is selected. Press Enter (or $\leftarrow$ ↓).

The key file summary provides material totals for fuel keys: (Key Date + Fuel Model Type + Subkey). This report also includes the packaging flag, which will be either "P" (key is fully packaged), or blank if any canister is open for repackaging. This report becomes WHC-IP-0683, with the same revision number as the data.

For instructions on selecting basin, report, size, and dates, refer to Section 3.2.5.

3.2.7 Storage Bucket Summary Report

PRESS S to select Storage Bucket Summary Report -or-
Move the cursor Up or Down along the Report Generation Menu until the StoBucSum line is selected. Press Enter (or $\leftarrow$ ↓).

This report presents data grouped by unirradiated enrichment, key date, and sub-key, with group summations on assemblies, inners, outers, pieces, weights, and energy. This report becomes WHC-IP-0682, with the same revision number as the data.

For instructions on selecting basin, report, size, and dates, refer to Section 3.2.5.

3.2.8 Canister Package Report

PRESS P to select Package Report -or-
Move the cursor Up or Down along the Report Generation Menu until the Package line is selected. Press Enter (or $\leftarrow$ ↓).

This report presents all encapsulation activity with necessary detail so the SNM Specialist can mark down how the encapsulated canisters are broken up.

For instructions on selecting basin, report, size, and dates, refer to Section 3.2.5.

3.2.9 Empty Report

PRESS E to select Empty Report -or-
Move the cursor Up or Down along the Report Generation Menu until the Empty line is selected. Press Enter (or $\downarrow$).

This report lists empty cubicles in the selected basin.

The basin selection menu appears (Figure 27).

To select, Press first character or <Enter>. To see explanation, highlight the appropriate selection using the cursor movement keys.

CHOOSE:	Menu: macbasin Directory: g:\mac\
East Basin	K area East material storage basin
West Basin	K area West material storage basin
Return	Return to Micro-MAC main menu
Leave	Leave Paradox and return to DOS
ZDOS	Shell out to DOS. Type exit, then <CR> to return

Figure 27 Empty Basin Selection Menu

PRESS E to select K East Basin -or-
PRESS W to select K West Basin -or-
Move the cursor Up or Down along the Report Generation Menu until the East Basin or West Basin line is selected. Press Enter (or $\downarrow$).

A report that finds all the empty cubicles in the selected basin is generated.

3.2.10 Unpack Report

PRESS U to select Unpack Report -or-
Move the cursor Up or Down along the Report Generation Menu until the Unpack line is selected. Press Enter (or $\downarrow$).

This report lists out all of the canisters that unpackaged within both of the K-East and K-West basins.

Messages indicating that the data is being gathered and processed will appear on the screen. Shortly thereafter the report will be generated.

3.3 Print Functions

PRESS **P** to select **Print Report** -or-
Move the cursor Up or Down along the **MAC Main Menu** until the **Print** line is selected. Press Enter (or **↵**).

3.3.1 Print Daily Report

PRESS **D** to select **Print Daily Report** -or-
Move the cursor Up or Down along the **Print Report Menu** until the **Daily** line is selected. Press Enter (or **↵**).

Because there is only one Daily report, the following menu will appear for all printouts (Figure 28):

To select, Press first character or <Enter>. To see explanation, highlight the appropriate selection using the cursor movement keys.	
	Menu: macplt Directory: g:\mac\
CHOOSE:	
1-LPT1	Usually the printer connected to your computer
2-LPT2	Usually an HP Laser printer on HLAN
3-LPT3	Alternate Printer
Return	Return to Micro-MAC main menu
Leave	Leave Paradox and return to DOS
ZDOS	Shell out to DOS. Type exit, then <CR> to return

Figure 28 Print device menu

3.3.2 Print Compact Report

PRESS **C** to select **Print Compact Report** -or-
Move the cursor Up or Down along the **Print Report Menu** until the **Compact** line is selected. Press Enter (or **↵**).

Because there is only one Compact report, the standard printout menu will be displayed (see Section 3.3.1).

3.3.3 Print Worksheets Report

PRESS W to select Print Worksheets Report -or-
Move the cursor Up or Down along the Print Report Menu until the Worksheets line is selected. Press Enter (or $\downarrow$).

The print worksheet menu appears on the screen (Figure 29).

To select, Press first character or <Enter>. To see explanation, highlight the appropriate selection using the cursor movement keys.

Menu: macwork	Directory: g:\mac\
CHOOSE:	
<u>S</u> hipping	Shipping worksheets
<u>P</u> ackaging	Packaging worksheets
<u>R</u> eturn	Return to Micro-MAC main menu
<u>Z</u> DOS	Shell out to DOS. Type exit, then <CR> to return
<u>L</u> ease	Leave Paradox and return to DOS

Figure 29 Print Worksheet Menu

PRESS S to select Shipping Worksheet -or-
PRESS P to select Packaging Worksheet -or-
Move the cursor Up or Down along the Print Report Menu until the Shipping or Packaging line is selected. Press Enter (or $\downarrow$).

The Basin Selection menu then appears (Figure 30).

To select, Press first character or <Enter>. To see explanation, highlight the appropriate selection using the cursor movement keys.

Menu: macbasin	Directory: g:\mac\
CHOOSE:	
<u>E</u> ast Basin	K area East material storage basin
<u>W</u> est Basin	K area West material storage basin
<u>R</u> eturn	Return to Micro-MAC main menu
<u>L</u> ease	Leave Paradox and return to DOS
<u>Z</u> DOS	Shell out to DOS. Type exit, then <CR> to return

Figure 30 Print Basin Selection Menu

PRESS E to select K East Basin -or-
PRESS W to select K West Basin -or-
Move the cursor Up or Down along the Print Report Menu until the East Basin, or West Basin line is selected. Press Enter (or $\downarrow$).

The standard printout menu will be displayed (see Section 3.3.1).

3.3.4 Print History Report

PRESS H to select Print History Report -or-
Move the cursor Up or Down along the Print Report Menu until the History line is selected. Press Enter (or $\downarrow$).

The following menu is displayed (Figure 31):

To select, Press first character or <Enter>. To see explanation, highlight the appropriate selection using the cursor movement keys.

CHOOSE:	Menu: machist	Directory: g:\mac\
<u>L</u> ocation	History of Canister Locations	
<u>C</u> anister	History of Canister Gross & Net Weight, Packaging Flag	
<u>M</u> aterial	History of Canister Material Contents	
<u>R</u> eturn	Return to Micro-MAC main menu	
<u>L</u> eave	Leave Paradox and return to DOS	
<u>Z</u> DOS	Shell out to DOS. Type exit, then <CR> to return	

Figure 31 Print History Menu

PRESS L to select a History Report by Location -or-
PRESS C to select a History Report by Canister -or-
PRESS M to select a History Report by Material -or-
Move the cursor Up or Down along the Report Generation Menu until the Location, Canister, or Material line is selected.
Press Enter (or $\downarrow$).

The standard printout menu will be displayed (see Section 3.3.1).

3.3.5 Print Map Report

PRESS M to select Print Map Report -or-
Move the cursor Up or Down along the Print Report Menu until the Map line is selected. Press Enter (or $\downarrow$).

The basin selection menu appears on the screen (Figure 32).

NOTE: This menu also applies to printing the Key File Summary, Storage Bucket Summary, and the Package and Empty reports.

To select, Press first character or <Enter>. To see explanation, highlight the appropriate selection using the cursor movement keys.

CHOOSE: East Basin West Basin Return Leave DOS	Menu: macbasin Directory: g:\mac\ K area East material storage basin K area West material storage basin Return to Micro-MAC main menu Leave Paradox and return to DOS Shell out to DOS. Type exit, then <CR> to return
---	--

Figure 32 Print Map Menu

PRESS E to select K East Basin -or-
PRESS W to select K West Basin -or-
Move the cursor Up or Down along the Report Generation Menu until the East Basin, or West Basin line is selected. Press Enter (or $\downarrow$).

The standard printout menu will be displayed (see Section 3.3.1).

3.3.6 Print Key File Summary Report

PRESS K to select Print Key File Summary Report -or-
Move the cursor Up or Down along the Print Report Menu until the KeyFileSum line is selected. Press Enter (or $\downarrow$).

For printing instructions, refer to Section 3.3.5.

3.3.7 Print StoBucSum Report

PRESS K to select **Print Storage Bucket Summary Report** -or-
Move the cursor Up or Down along the **Print Report Menu** until the
StoBucSum line is selected. Press Enter (or **↵**).

For printing instructions, refer to Section 3.3.5.

3.3.8 Print Canister Package Report

PRESS K to select **Print Package Report** -or-
Move the cursor Up or Down along the **Print Report Menu** until the
Package line is selected. Press Enter (or **↵**).

For printing instructions, refer to Section 3.3.5.

3.3.9 Print Empty Report

PRESS E to select **Print Empty Cubicle Report** -or-
Move the cursor Up or Down along the **Print Report Menu** until the
Empty line is selected. Press Enter (or **↵**).

For printing instructions, refer to Section 3.3.5.

3.3.10 Print Unpack Report

PRESS U to select **Print Unpack Report** -or-
Move the cursor Up or Down along the **Print Report Menu** until the
Unpack line is selected. Press Enter (or **↵**).

The standard printout menu will be displayed (see Section 3.3.1).

3.4 Help Functions

The help functions do not modify the data; instead, they display various views of the data to help the user. In the 3.1 version of the MAC system, some screens have new format and/or content because of changes in the data structure and addition of the encapsulation functions.

PRESS H to select Help -or-

Move the cursor Up or Down along the Main Menu until the Help line is selected. Press Enter (or $\downarrow$).

The help menu appears on the screen (Figure 33).

To select, Press first character or <Enter>. To see explanation, highlight the appropriate selection using the cursor movement keys.

CHOOSE:	Menu: machelp	Directory: g:\mac\
<u>D</u> aily <u>H</u> istory <u>A</u> ll <u>L</u> ocation <u>C</u> anister <u>M</u> aterial <u>F</u> actor <u>R</u> eturn <u>L</u> ease <u>Z</u> DOS	Daily Encapsulation Table History of Location/Canister/Material data changes Location, Canister, & Material Tables Locations of Canisters Canister Parameters: Gross Wt, Net Wt, Pkg Flag Display Canister Contents Factor table: factor weights, fuel model types Return to Micro-MAC main menu Leave Paradox and return to DOS Shell out to DOS. Type exit then <CR> to return	

Figure 33 Help Menu

3.4.1 Display Daily Encapsulation Tables

PRESS D to select Daily Encapsulation Display -or- Move the cursor Up or Down along the Help Menu until the Daily line is selected. Press Enter (or ↵).

The display of the "Daily" table, which records daily encapsulation operations, is shown next (Figure 34). Daily encapsulation reports are generated from this table.

F1 (Search), Note: To search, use F1, but move to field, using arrows
Enter (Return), Esc (Abort), PgUp, PgDn, Home(Top), End(Bottom)

Encaps.	Before Encapsulation										Database	
Date	Can #	Loc	PGwt/Nwt	C	O	N	T	E	N	T	S	Operator/Seq #
6/04/93	4569	W0805	500	3858	BC	7	0	0	0			Vern Russell
			480	3858	BE	7	0	0	0			0011
		Loose Material Encapsulation										
	0000	W0103	500	3858	BC	7	0	0	0			
			444	3858	BE	7	0	0	0			
		Stuck Material										
	S000	W010S	500	3858	BG	7	0	0	0			

Figure 34 Daily Encapsulation Table Screen

OBSERVE the daily encapsulation screen and note the three material categories displayed:

- (1) Before Encapsulation
- (2) Loose Material Encapsulation
- (3) Stuck Material

PRESS the <PgDn> key a few times and OBSERVE that each screen contains the complete encapsulation information for a particular canister.

OBSERVE that the Database Operator and Sequence number are given for each encapsulation (See Figure 34 Upper Right Corner).

PRESS the <End> and <Home> keys and OBSERVE the beginning and end of the "daily" table.

PRESS <Esc> key to return to the Help menu.

3.4.2 Display History Tables

PRESS H to select Print History Report -or-
Move the cursor Up or Down along the Help Menu until the
History line is selected. Press Enter (or $\downarrow$).

The History tables will be displayed (Figure 35):

F1 (Search), F3(Up Table), F4(Down Table) PgUp, PgDn, Home(Top), End(Bottom)
Esc (Return) Note: To search, use F1, but move to field, using F3, F4, arrows
Data Revision Number 162

TABLE HIST-LOC							
Sequence Identifier	Rev Typ	Can #	Can Loc	Previous Loc	Action Date	Database Updated	
0012-V Russel	B	0000	E0103	W0103	6/04/93	6/04/93	
0013-V Russel	B	0000	W0103	E0103	6/04/93	6/04/93	
0014-V Russel	I	0000	W0100	W0103	6/04/93	6/04/93	

TABLE HIST-CAN								
Sequence Identifier	Rv Tp	Can No.	Purged Wt.	Pkg Flg	Net Wt.	Previous Data No-PurWt-pkg-NetWt	Action Date	Database Updated
0015-V Russel	P	0000	500	P	444	0000-500-P-444	6/04/93	6/04/93
0016-V Russel	P	0000	500	P	444	0000-500-P-444	6/04/93	6/04/93
0087-97504	P	5455E	477	P	377	5455E-0-P-0	8/24/92	8/24/92

TABLE HIST-MAT									
Ident	Ch Tp	Can #	Key Date	F U E L Type	MWD's	Numbers As	of Ou In Pc	Previous	Contents
0004-KR_MO	C	6859E	4356D	BC	0	0	1 0 0	New Record	
0005-KR_MO	C	6859E	4356D	BE	0	0	0 7 0	4356-D-BE-0-0-0-5-0	
0017-V Russel	A	0000	3858	BE	382.07	7	0 0 0	3858--BE-382.07-7-0-0-0	

Figure 35 History Tables Screen

OBSERVE the following:

- (1) The data revision number at the top is normally the current revision, but other revisions (if present in the history table) can be viewed by pressing <PgUp> or <PgDn> keys.
- (2) The three tables shown (HIST-LOC, HIST-CAN, and HIST-MAT) can be scrolled or searched individually by following the directions at the top of screen. These tables are not linked to one another.
- (3) Each transaction has a sequence identifier consisting of a sequence number and database operator.
- (4) In each table, revision type, date, and previous condition are given.

PRESS <Esc> key to return to the Help menu.

3.4.3 Display All (Location, Canister, and Material) Tables

PRESS A to select Location, Canister, and Material Display -or- Move the cursor Up or Down along the Help Menu until the All line is selected. Press Enter (or ↵).

OBSERVE that the three tables (Figure 36): Location, Canister, and Material are displayed as shown. OBSERVE that the cursor is positioned in the Location table.

F1 (Search), F3(Up Table), F4(Down Table) PgUp, PgDn, Home(Top), End(Bottom)
Esc (Return) Note: To search, use F1, but move to field, using F3, F4, arrows

L O C A T I O N		C A N I S T E R			
Can #	Location	Purged Wt	Net Wt	Pkg	
9170	W5839	725	0	P	

		M A T E R I A L				
Key	FMT	MWD's	Assemblies	Outers	Inners	Pieces
3524	BC	25.82	1	0	0	0
3524	BE	797.43	13	0	0	0

Figure 36 All (Location, Canister, Material) Tables Screen

NOTE: The three tables are linked by canister number. The canister number that is shown for the Location table also pertains to the other two tables, even though the number is not shown beside the canister or material tables.

PRESS the F4 key twice. OBSERVE that the cursor moves to the Material table.

PRESS the F3 key twice. OBSERVE that the cursor returns to the Location table.

PRESS the <PgDn> key about 20 times. OBSERVE that the Canister and Material tables scroll with the Location table. OBSERVE that some canisters have only one line in the Material table but that many have several lines of contents (different fuel model types).

PRESS the <Home> key and OBSERVE that the beginning of the three tables (linked by canister number) are displayed.

PRESS the <End> key and OBSERVE that the end of the three tables (linked by canister number) are displayed.

SEARCH for a canister number or location by following the instructions at the top of the screen. Remember to position the cursor in the desired target field before pressing the F1 key for a search.

PRESS <Esc> to return to the Help menu.

3.4.4 Display Location Table

PRESS L to select Location Display -or-
Move the cursor Up or Down along the Help Menu until the
Location line is selected. Press Enter (or $\downarrow$).

The Location table will be displayed as follows (Figure 37):

F1 (Search), Note: To search, use F1, but move to field, using arrows
Enter (Return), Esc (Abort), PgUp, PgDn, Home(Top), End(Bottom)

Location Table	
Can #	Location
9170	W5839

Figure 37 Location Table Screen

PRESS <Esc> to return to the Help menu.

3.4.5 Display Canister Table

PRESS L to select Canister Display -or-
Move the cursor Up or Down along the Help Menu until the
Canister line is selected. Press Enter (or $\downarrow$).

The Canister table will be displayed as follows (Figure 38):

F1 (Search), Note: To search, use F1, but move to field, using arrows
Enter (Return), Esc (Abort), PgUp, PgDn, Home(Top), End(Bottom)

C A N I S T E R			
Can #	Purged Wt	Net Wt	Pkg
9170	725	0	P

Figure 38 Canister Table Screen

PRESS <Esc> to return to the Help menu.

3.4.6 Display Material Table

PRESS M to select Material Display -or-
Move the cursor Up or Down along the Help Menu until the
Material line is selected. Press Enter (or ↵).

The Material table will be displayed (Figure 39):

F1 (Search), Note: To search, use F1, but move to field, using arrows
Enter (Return), Esc (Abort), PgUp, PgDn, Home(Top), End(Bottom)

Can #	M Key	A FMT	T MWD's	E Assemblies	R Outers	I Inners	A Pieces	L E
9170	3524	BE	797.43	13	0	0	0	

Figure 39 Material Table Screen

PRESS <Esc> to return to the Help menu.

3.4.7 Display Factor Table

PRESS F to select Factor Display -or-
Move the cursor Up or Down along the Help Menu until the
Factor line is selected. Press Enter (or ↵).

The Factor table will be displayed as follows (Figure 40):

F1 (Search), Note: To search, use F1, but move to field, using arrows
Enter (Return), Esc (Abort), PgUp, PgDn, Home(Top), End(Bottom)

Factor Table						W E I G H T S		SCATS
FUEL MODEL TYPE		Enrichment		Length	(Lbs)			Model
Short	Long	Outer	Inner	Inches	Outer	Inner	Assembly	Type
ON	O3N	B	0.711	0.711	8.0		7.42	O3N

Figure 40 Factor Table Screen

PRESS <Esc> to return to the Help menu.

3.5 Xport Daily Files

PRESS X to select Export Daily Data -or-
Move the cursor Up or Down along the MAC Main Menu until the
Xport line is selected. Press Enter (or $\downarrow$).

A prompt appears asking the user to confirm the exporting process.
Answer "N" when not sure; a "Y" answer will start the export, and the
following message will appear on the screen.

```
Beginning report: exdaily.rpt 12:08:43  
Generating EXDAILY.RPT file 12:08:44
```

Another prompt asks for the number of copies of the daily export report.
Enter the appropriate number, and the report will be printed.

```
Number of copies -->1
```

```
Printing completed!  
Press any key to continue
```

3.6 Open a New MAC Revision

PRESS O to select Open a new Revision -or-
Move the cursor Up or Down along the MAC Main Menu until the
OpenRev line is selected. Press Enter (or $\downarrow$).

"Are you Sure" appears on the screen. If "Y" is pressed, a new revision
is opened.

3.7 Close Current Revision

PRESS C to select Close the Current Revision -or-
Move the cursor Up or Down along the MAC Main Menu until the
CloseRev line is selected. Press Enter (or $\downarrow$).

"Are you Sure" appears on the screen. If "Y" is pressed, the current
revision is closed.

3.8 FileLoad

PRESS F to select Load a File -or-
Move the cursor Up or Down along the MAC Main Menu until the
FileLoad line is selected. Press Enter (or ↵).

A message requesting the MAC system manager to restore the files is
displayed.

3.9 Executive

PRESS E to select Executive Functions -or-
Move the cursor Up or Down along the MAC Main Menu until the
Executive line is selected. Press Enter (or ↵).

OBSERVE a prompt asking for the system password, which can be changed if
desired, and if the user has Password privileges.

FILL in the password.

A display of a table listing all the users of the system and their user
privileges appears.

NOTE: At this point the System Administrator can modify this table to
add users and their privileges to MAC.

3.10 Backup

PRESS B to select Backup Files -or-
Move the cursor Up or Down along the MAC Main Menu until the
Backup line is selected. Press Enter (or ↵).

"Are you Sure" appears on the screen.

If "Y" is pressed, the user is prompted for a Weekly (W) or Monthly (M)
backup. A weekly backup backs up the most critical files that change
the most in the system. A monthly backup backs up all of the files.

The system proceeds to backup the system and returns to the main menu
when the backup is complete.

3.11 GoParadox and Applications

PRESS G to select GoParadox -or-
PRESS A to select Applications -or-
Move the cursor Up or Down along the MAC Main Menu until the
GoParadox or Applications line is selected. Press Enter (or ↵).

These selections allow the user to exit the MAC system to run Paradox applications or to return to the K Basin Applications menu (see Section 2.1).

NOTE: This procedure is the regular way to exit the MAC system and return to the application menu to run another program. To exit Paradox, see Section 3.9, ZDOS, Return, and Leave.

3.12 ZDOS, Return, and Leave

PRESS Z to select ZDOS -or-
PRESS R to select Return -or-
PRESS Q to select Quit -or-
Move the cursor Up or Down along any menu until the ZDOS, Return, or Quit line is selected. Press Enter (or ↵).

These selections appear in every MAC system menu, allowing the user to perform DOS functions, return to the previous menu, or to quit the program and exit Paradox.

4.0 REFERENCES

- (1) Russell, V.K. and Mullaney, J.E., "MAC Database Acceptance Test Procedures", WHC-SD-NR-CSWD-045, Westinghouse Hanford Company, May 31, 1990.
- (2) Mullaney, J.E., "MICRO-MAC Acceptance Test Summary Report", Westinghouse Hanford Company, July 12, 1990.
- (3) Mullaney, J.E. "MAC Database Mini Acceptance Test Procedures for Software Version 2.3, Westinghouse Hanford Company, June 14, 1991.
- (4) Mullaney, J.E., "MICRO-MAC Acceptance Test Summary Report (Version 2.3)", Westinghouse Hanford Company, August 30, 1991.
- (5) Mullaney, J.E./Russell V.K., "Materials Accounting Database Software Configuration Management Plan", Westinghouse Hanford Company, July 12, 1990.

5.0 APPENDIX A -- Reports

WHC-SD-SNF-UM-001, Rev 0
Figure A-1

MAC Version 3.1

UNCLASSIFIED Document

REV 162 Updated: 1/18/93

4/14/93

Encapsulation Daily Report

Page 1

Encapsulation Date: April 2, 1993																														Sequence: 0006 Operator: Jim Mullaney Comments ----- _____ _____ _____ _____
BEFORE ENCAPSULATION										AFTER ENCAPSULATION										STUCK CANISTER										
Canister		WEIGHT		C O N T E N T S						Canister		WEIGHT		C O N T E N T S						Canister		C O N T E N T S								
Number	Loc.	Gross	Net	Key	FM	Asm	Out	Inn	Pcs	Number	Loc.	Gross	Net	Key	FM	Asm	Out	Inn	Pcs	Number	Loc.	Key	FM	Asm	Out	Inn	Pcs			
2412E	E2412	0	0	5458 BA	6	0	0	0	0	9812	E3312	500	450	5458 BC	4	0	0	0	0	0007S	E2412	5458 BA	6	0	0	0	0			
				5458 BC	4	0	0	0	0					5458 BE	1	0	0	0	0											
				5458 BE	1	0	0	0	0					5458 BS	3	0	0	0	0											
				5458 BS	3	0	0	0	0																					

Encapsulation Date: April 14, 1993																														Sequence: 0007 Operator: Jim Mullaney Comments ----- ----- ----- ----- -----
BEFORE ENCAPSULATION										AFTER ENCAPSULATION										STUCK CANISTER										
Canister		WEIGHT		C O N T E N T S						Canister		WEIGHT		C O N T E N T S						Canister		C O N T E N T S								
Number	Loc.	Gross	Net	Key	FM	Asm	Out	Inn	Pcs	Number	Loc.	Gross	Net	Key	FM	Asm	Out	Inn	Pcs	Number	Loc.	Key	FM	Asm	Out	Inn	Pcs			
1704E	E1704	0	0	0770D BC	1	0	0	0	0	9177	E1701	500	400	0770D BC	1	0	0	0	0	0008S	E1704	0770D BE	11	0	0	0	0			
				0770D BE	11	0	0	0	0					0770D BS	2	0	0	0	0											
				0770D BS	2	0	0	0	0																					

MAC Version 3.1 UNCLASSIFIED Document WHC-IP-0683 REV 162 Updated: 1/18/93

Report Date 8/05/93

K-East Key Summary

Page 1

Key Date	Sub Model Key Type	Fuel Assemblies	Outers	Inners	Other Pieces
0001	BA	0	0	1	0
0001	BC	2	2	0	0
0001	BE	0	0	4	0
0001	BS	0	1	5	0
Key Date Total:		2	3	10	0
0201 D	AA	85	0	0	0
0201 D	BE	23	0	0	0
0201 D	BS	23	0	0	0
Key Date Total:		131	0	0	0
0259 B	AA	0	0	1	0
0259 D	AA	4	0	0	0
0259 B	BC	135	4	9	0
0259 D	BC	1	0	0	0
0259 B	BE	747	10	4	0
0259 D	BE	19	0	0	0
Key Date Total:		906	14	14	0
0294 B	AA	1	0	0	0
0294 B	AB	2	0	3	0
0294 D	AB	0	1	0	0
0294 B	BC	61	10	5	0
0294 C	BC	0	0	5	0
0294 D	BC	6	0	0	0
0294 B	BE	1386	8	12	0
0294 C	BE	37	5	0	0
0294 D	BE	82	0	1	0
0294 B	BS	41	3	1	0
0294 D	BS	7	0	0	0
Key Date Total:		1623	27	27	0
0350 D	BC	3	0	0	0
0350 D	BE	15	0	0	0
0350 D	BS	6	0	0	0
Key Date Total:		24	0	0	0
0385 B	AB	10	0	1	0
0385 D	AB	2	0	1	0
0385 B	BA	8	1	0	0
0385 D	BA	1	0	0	0
0385 B	BE	1418	1	1	0
0385 D	BE	75	3	1	0
0385 B	BS	18	0	0	0
0385 D	BS	2	0	2	0
Key Date Total:		1534	5	6	0
0456 D	AD	1	0	0	0
0456 B	BA	18	0	0	0
0456 D	BA	2	0	0	0
0456 B	BC	82	0	0	0
0456 D	BC	5	0	0	0

MAC Version 3.1 UNCLASSIFIED Document WHC-IP-0683 REV 162 Updated: 1/18/93

Report Date 8/05/93

K-East Key Summary

Page 2

Key Date	Sub Model Key Type	Fuel Assemblies	Outers	Inners	Other Pieces
0456 B	BE	805	0	0	0
0456 D	BE	112	2	0	0
0456 B	BS	131	0	0	0
0456 D	BS	14	0	0	0
Key Date Total:		1170	2	0	0
0576 B	BE	166	0	0	0
0576 B	BS	2	0	0	0
Key Date Total:		168	0	0	0
0602 B	AB	4	0	0	0
0602 D	AB	1	0	0	0
0602 B	BA	5	0	0	0
0602 C	BA	13	0	0	0
0602 D	BA	9	0	0	0
0602 D	BC	2	0	0	0
0602 B	BE	360	0	0	0
0602 C	BE	449	0	0	0
0602 D	BE	252	2	0	0
0602 B	BS	9	0	0	0
0602 D	BS	47	0	0	0
Key Date Total:		1151	2	0	0
0679 B	AB	14	0	0	0
0679 D	AB	5	0	0	0
0679 B	BA	2	0	0	0
0679 D	BA	4	1	0	0
0679 B	BC	75	0	0	0
0679 D	BC	6	0	0	0
0679 B	BE	400	0	0	0
0679 D	BE	583	0	0	0
0679 B	BS	41	0	0	0
0679 D	BS	18	0	0	0
Key Date Total:		1148	1	0	0
0742 B	BC	66	3	1	0
0742 C	BC	41	1	3	0
0742 B	BE	186	2	3	0
0742 C	BE	329	3	1	0
0742 D	BE	258	0	0	0
0742 B	BS	9	0	1	0
0742 C	BS	18	0	0	0
0742 D	BS	4	0	0	0
Key Date Total:		911	9	9	0
0764	7E	2	0	0	0
0764	BA	22	0	1	0
0764	BE	15	1	3	0
0764	BR	19	0	1	0
0764	BS	31	4	0	0
Key Date Total:		89	5	5	0

MAC Version 3.1 UNCLASSIFIED Document WHC-IP-0683 REV 162 Updated: 1/18/93

Report Date 8/05/93

K-East Key Summary

Page 3

Key Date	Sub Model	Fuel Assemblies	Outers	Inners	Other Pieces
0770 B	BC	39	0	0	0
0770 D	BC	5	0	0	0
0770 B	BE	280	0	0	0
0770 D	BE	324	0	0	0
0770 B	BS	101	0	0	0
0770 D	BS	101	0	0	0
Key Date Total:		850	0	0	0
0832 B	AB	15	0	0	0
0832 D	AB	1	0	0	0
0832 C	BA	2	0	0	0
0832 B	BC	72	0	0	0
0832 C	BC	44	0	0	0
0832 D	BC	16	0	0	0
0832 B	BE	675	0	0	0
0832 C	BE	1060	0	0	0
0832 D	BE	290	0	0	0
0832 B	BS	36	0	0	0
0832 C	BS	42	0	0	0
0832 D	BS	65	0	0	0
Key Date Total:		2318	0	0	0
0982 B	AB	13	2	2	0
0982 D	AB	1	0	0	0
0982 B	BA	4	1	1	0
0982 D	BA	4	0	0	0
0982 B	BC	60	1	1	0
0982 D	BC	6	0	0	0
0982 B	BE	331	10	2	0
0982 D	BE	616	0	0	0
0982 B	BS	26	0	8	0
0982 D	BS	37	0	0	0
Key Date Total:		1098	14	14	0
1036 D	AD	1	0	0	0
1036 D	BA	0	0	2	0
1036 B	BC	24	6	0	0
1036 D	BC	1	0	0	0
1036 B	BE	138	2	6	0
1036 C	BE	102	0	0	0
1036 D	BE	249	1	0	0
1036 B	BS	12	0	2	0
1036 C	BS	10	0	0	0
1036 D	BS	23	1	0	0
Key Date Total:		560	10	10	0
1109 B	BA	4	1	0	0
1109 D	BA	7	0	1	0
1109 B	BC	50	3	7	0
1109 D	BC	10	1	0	0
1109 B	BE	333	5	3	0
1109 D	BE	613	0	0	0

MAC Version 3.1 UNCLASSIFIED Document WHC-IP-0683 REV 162 Updated: 1/18/93

Report Date 8/05/93

K-East Key Summary

Page 4

Key Date	Sub Key	Model Type	Fuel Assemblies	Outers	Inners	Other Pieces
1109 B	BS		23	1	0	0
1109 D	BS		59	0	0	0
Key Date Total:			1099	11	11	0
1183 B	AB		5	0	1	0
1183 C	AB		10	1	1	0
1183 D	AB		1	0	0	0
1183 B	BA		1	0	0	0
1183 C	BA		0	0	1	0
1183 D	BA		8	1	0	0
1183 B	BC		7	1	0	0
1183 C	BC		9	0	1	0
1183 D	BC		2	1	1	0
1183 B	BE		515	3	1	0
1183 C	BE		690	3	2	0
1183 D	BE		865	4	1	0
1183 B	BS		14	0	2	0
1183 C	BS		13	2	1	0
1183 D	BS		41	0	1	0
Key Date Total:			2181	16	13	0
1372 B	AB		8	2	1	0
1372 D	AB		2	0	0	0
1372 B	BA		1	0	1	0
1372 D	BA		1	1	0	0
1372 B	BC		27	3	0	0
1372 D	BC		9	1	0	0
1372 B	BE		531	1	6	0
1372 D	BE		721	0	2	0
1372 B	BS		13	2	0	0
1372 D	BS		31	0	0	0
Key Date Total:			1344	10	10	0
1449 B	BA		5	1	0	0
1449 D	BA		8	0	0	0
1449 B	BC		1	0	0	0
1449 D	BC		7	1	0	0
1449 B	BE		464	11	7	0
1449 D	BE		548	1	2	0
1449 B	BS		142	6	11	0
1449 D	BS		76	1	1	0
Key Date Total:			1251	21	21	0
1540 B	AB		14	0	0	0
1540 B	BA		10	0	1	0
1540 B	BC		4	0	1	0
1540 B	BE		474	4	3	0
1540 D	BE		42	0	0	0
1540 B	BS		36	4	3	0
Key Date Total:			580	8	8	0
1733 B	BE		21	1	0	0

MAC Version 3.1 UNCLASSIFIED Document WHC-IP-0683 REV 162 Updated: 1/18/93

Report Date 8/05/93

K-East Key Summary

Page 5

Key Date	Sub Key	Model Type	Fuel Assemblies	Outers	Inners	Other Pieces
1733	B	BS	6	0	1	0
Key Date Total:			27	1	1	0
1806	B	AB	12	2	0	0
1806	D	AB	1	0	0	0
1806	B	BA	5	1	0	0
1806	B	BC	1	1	1	0
1806	B	BE	588	2	4	0
1806	D	BE	573	0	1	0
1806	B	BS	3	1	2	0
1806	D	BS	13	1	0	0
Key Date Total:			1196	8	8	0
1897	D	BA	0	0	1	0
1897	B	BC	242	7	8	0
1897	D	BC	39	1	0	0
1897	B	BE	301	7	7	0
1897	D	BE	972	3	3	0
1897	B	BS	28	3	2	0
1897	D	BS	74	3	3	0
Key Date Total:			1656	24	24	0
1979	B	AB	5	0	0	0
1979	B	BC	121	4	9	0
1979	D	BC	75	0	0	0
1979	B	BE	346	5	4	0
1979	D	BE	955	4	3	0
1979	B	BS	58	7	3	0
1979	D	BS	82	3	5	0
Key Date Total:			1642	23	24	0
2127	C	AB	9	0	0	0
2127	B	BA	5	0	0	0
2127	C	BA	11	0	0	0
2127	D	BA	8	0	0	0
2127	B	BC	7	0	0	0
2127	C	BC	9	0	0	0
2127	D	BC	6	0	0	0
2127	B	BE	250	0	0	0
2127	C	BE	296	0	0	0
2127	D	BE	577	0	0	0
2127	B	BS	32	0	0	0
2127	C	BS	39	0	0	0
2127	D	BS	81	0	0	0
Key Date Total:			1330	0	0	0
2201	B	AB	7	0	0	0
2201	D	AB	1	0	0	0
2201	B	BC	26	0	0	0
2201	D	BC	3	1	0	0
2201	B	BE	315	0	0	0
2201	D	BE	367	0	1	0

MAC Version 3.1 UNCLASSIFIED Document WHC-IP-0683 REV 162 Updated: 1/18/93

Report Date 8/05/93

K-East Key Summary

Page 6

Key Date	Sub Key	Model Type	Fuel Assemblies	Outers	Inners	Other Pieces
2201 B	BS		100	0	0	0
2201 D	BS		158	0	0	0
Key Date Total:			977	1	1	0
2240 B	BE		2	0	0	0
2240 C	BE		2	0	0	0
Key Date Total:			4	0	0	0
2285 D	BA		0	1	0	0
2285 B	BC		33	0	0	0
2285 C	BC		11	0	0	0
2285 D	BC		5	0	1	0
2285 B	BE		663	0	0	0
2285 C	BE		1074	1	0	0
2285 D	BE		733	1	0	0
2285 B	BS		60	0	0	0
2285 C	BS		76	0	0	0
2285 D	BS		142	0	0	0
Key Date Total:			2797	3	1	0
2480 B	BA		6	0	0	0
2480 C	BA		8	0	0	0
2480 D	BA		14	0	0	0
2480 B	BC		10	0	0	0
2480 C	BC		5	0	0	0
2480 D	BC		1	0	0	0
2480 B	BE		563	0	0	0
2480 C	BE		707	0	0	0
2480 D	BE		854	0	0	0
2480 B	BS		51	0	0	0
2480 C	BS		50	0	0	0
2480 D	BS		69	0	0	0
Key Date Total:			2338	0	0	0
2565 B	BA		4	0	0	0
2565 C	BA		10	0	0	0
2565 B	BC		3	0	0	0
2565 C	BC		2	0	0	0
2565 D	BC		4	0	0	0
2565 B	BE		468	0	0	0
2565 C	BE		551	0	0	0
2565 D	BE		470	0	2	0
2565 B	BS		57	0	0	0
2565 C	BS		95	0	0	0
2565 D	BS		14	0	0	0
Key Date Total:			1678	0	2	0
2639	7E		1	0	0	0
2639 B	BE		604	1	0	0
2639 C	BE		615	1	0	0
2639 D	BE		507	0	0	0
2639 B	BS		53	0	0	0

MAC Version 3.1 UNCLASSIFIED Document WHC-IP-0683 REV 162 Updated: 1/18/93

Report Date 8/05/93

K-East Key Summary

Page 7

Key Date	Sub Model Type	Fuel Assemblies	Outers	Inners	Other Pieces
2639 C	BS	70	0	0	0
2639 D	BS	123	0	0	0
Key Date Total:		1973	2	0	0
2852	BE	28	0	0	0
2852 B	BE	80	0	0	0
Key Date Total:		108	0	0	0
3015	BC	14	0	0	0
3015	BE	28	0	0	0
Key Date Total:		42	0	0	0
3016	BS	1	0	0	0
Key Date Total:		1	0	0	0
3371	BE	1	0	0	0
Key Date Total:		1	0	0	0
3649	7E	16	0	0	0
3649	BC	38	0	0	0
3649	BE	170	0	0	0
Key Date Total:		224	0	0	0
3685	BE	112	0	0	0
Key Date Total:		112	0	0	0
4065	BE	0	0	3	0
Key Date Total:		0	0	3	0
4355 C	BC	6	0	0	0
4355 D	BC	3	0	0	0
4355 B	BE	251	0	0	0
4355 C	BE	72	0	0	0
4355 D	BE	67	0	0	0
4355 B	BS	1	0	0	0
4355 C	BS	6	0	0	0
4355 D	BS	14	0	0	0
Key Date Total:		420	0	0	0
4356 D	AA	169	14	14	0
4356 D	BA	395	1	0	0
4356 D	BC	0	1	0	0
4356 D	BE	58	0	9	0
4356 D	BS	17	2	0	0
Key Date Total:		639	18	23	0
4722	7E	3	0	0	0
Key Date Total:		3	0	0	0
5204	7E	15	0	0	0
5204	BA	689	0	0	0
5204	BC	204	0	0	0

MAC Version 3.1 UNCLASSIFIED Document WHC-IP-0683 REV 162 Updated: 1/18/93

Report Date 8/05/93

K-East Key Summary

Page 8

Key Date	Sub Model Key Type	Fuel Assemblies	Outers	Inners	Other Pieces
5204	BE	2539	3	3	0
5204	BS	914	0	0	0
Key Date Total:		4361	3	3	0
5240	7E	16	0	0	0
5240	BA	0	0	1	0
5240	BE	0	1	0	0
5240	BS	4	0	1	0
Key Date Total:		20	1	2	0
5316	BA	484	0	0	0
5316	BC	12	0	0	0
5316	BE	212	0	1	0
5316	BS	197	0	0	0
Key Date Total:		905	0	1	0
5399	BE	16	0	0	0
Key Date Total:		16	0	0	0
5444	BA	5	0	0	0
5444	BE	5	0	0	0
5444	BS	4	0	0	0
Key Date Total:		14	0	0	0
5451	7E	64	0	0	0
5451	BA	328	0	0	0
5451	BC	6	0	0	0
5451	BS	2	0	0	0
Key Date Total:		400	0	0	0
5455	BA	18	0	0	0
5455	BE	32	0	0	0
5455	BS	17	0	0	0
Key Date Total:		67	0	0	0
5457	7E	2	0	0	0
5457	BA	14	0	0	0
Key Date Total:		16	0	0	0
5458	7E	16	0	0	0
5458	BA	1026	0	0	0
5458	BC	168	0	0	0
5458	BE	2880	0	0	0
5458	BR	19	0	0	0
5458	BS	1836	0	0	0
Key Date Total:		5945	0	0	0
5460	7E	126	0	0	0
5460	BA	720	0	0	0
Key Date Total:		846	0	0	0
5461	BE	544	0	0	0

MAC Version 3.1 UNCLASSIFIED Document WHC-IP-0683 REV 162 Updated: 1/18/93

Report Date 8/05/93

K-East Key Summary

Page 9

Key Date	Sub Model Key Type	Fuel Assemblies	Outers	Inners	Other Pieces
Key Date Total:		544	0	0	0
9621	CE	0	0	0	42
9621	CN	0	0	0	2
9621	KE	0	0	0	29
9621	KN	0	0	0	42
9621	KO	0	0	0	3
9621	KW	0	0	0	1
9621	OE	0	0	0	4
9621	ON	0	0	0	15
Key Date Total:		0	0	0	138
Grand Total:		50440	242	251	138

MAC Version 3.0		UNCLASSIFIED Document		REV 162 Updated: 8/24/92		September 17, 1992	
Load # _____		Packaging Worksheet				Page 1	
Key 0201D	Enrichment 0.947%	K East					
Cubicle Lid #	Type fuel	Enrich.	Length	Asm	Inner	Outer	Other Shift Date
E6163	6163E A09N09A	0.947	23.2	8	0	0	0
E6163	6163E B09X09E	0.947	26.0	1	0	0	0
E6163	6163E B09X09S	0.947	24.5	3	0	0	0
E6165	6165E A09N09A	0.947	23.2	12	0	0	0
E6166	6166E A09N09A	0.947	23.2	10	0	0	0
E6166	6166E B09X09E	0.947	26.0	2	0	0	0
E6167	6167E A09N09A	0.947	23.2	3	0	0	0
E6167	6167E B09X09E	0.947	26.0	6	0	0	0
E6167	6167E B09X09S	0.947	24.5	3	0	0	0
E6367	6367E A09N09A	0.947	23.2	5	0	0	0
E6367	6367E B09X09E	0.947	26.0	3	0	0	0
E6367	6367E B09X09S	0.947	24.5	4	0	0	0
E6368	6368E A09N09A	0.947	23.2	1	0	0	0
E6368	6368E B09X09E	0.947	26.0	4	0	0	0
E6368	6368E B09X09S	0.947	24.5	7	0	0	0
E6369	6369E A09N09A	0.947	23.2	11	0	0	0
E6369	6369E B09X09S	0.947	24.5	1	0	0	0
E6370	6370E A09N09A	0.947	23.2	9	0	0	0
E6370	6370E B09X09E	0.947	26.0	2	0	0	0
E6371	6371E A09N09A	0.947	23.2	11	0	0	0
E6371	6371E B09X09E	0.947	26.0	1	0	0	0
E6372	6372E A09N09A	0.947	23.2	12	0	0	0
E6373	6373E A09N09A	0.947	23.2	3	0	0	0
E6373	6373E B09X09E	0.947	26.0	4	0	0	0
E6373	6373E B09X09S	0.947	24.5	5	0	0	0

MAC Version 3.0

UNCLASSIFIED Document

REV 162 Updated: 8/24/92

Load # _____

September 16, 1992

Key 02010

Enrichment 0.947%

Shipping Worksheet
K East to K West

Page 1

Cubicle	Lid #	Type fuel	Length	Asm	Inner	Outer	Other	Shift	Date	Car	Well	Load
E6163	6163E	A09N09A	23.2	8	0	0	0					
E6163	6163E	B09X09E	26.0	1	0	0	0					
E6163	6163E	B09X09S	24.5	3	0	0	0					
E6165	6165E	A09N09A	23.2	12	0	0	0					
E6166	6166E	A09N09A	23.2	10	0	0	0					
E6166	6166E	B09X09E	26.0	2	0	0	0					
E6167	6167E	A09N09A	23.2	3	0	0	0					
E6167	6167E	B09X09E	26.0	6	0	0	0					
E6167	6167E	B09X09S	24.5	3	0	0	0					
E6367	6367E	A09N09A	23.2	5	0	0	0					
E6367	6367E	B09X09E	26.0	3	0	0	0					
E6367	6367E	B09X09S	24.5	4	0	0	0					
E6368	6368E	A09N09A	23.2	1	0	0	0					
E6368	6368E	B09X09E	26.0	4	0	0	0					
E6368	6368E	B09X09S	24.5	7	0	0	0					
E6369	6369E	A09N09A	23.2	11	0	0	0					
E6369	6369E	B09X09S	24.5	1	0	0	0					
E6370	6370E	A09N09A	23.2	9	0	0	0					
E6370	6370E	B09X09E	26.0	2	0	0	0					
E6371	6371E	A09N09A	23.2	11	0	0	0					
E6371	6371E	B09X09E	26.0	1	0	0	0					
E6372	6372E	A09N09A	23.2	12	0	0	0					
E6373	6373E	A09N09A	23.2	3	0	0	0					
E6373	6373E	B09X09E	26.0	4	0	0	0					
E6373	6373E	B09X09S	24.5	5	0	0	0					

WHC-SD-SNF-UM-001, Rev 0
Figure A-5

MAC Version 3.1

UNCLASSIFIED Document

REV 163 Updated: 6/07/93

6/15/93

Canister Weight / Packaging History

Page 1

Revision Number	Transaction Identifier	Rev. Type	Lid Number	Canister Purged Weight	Pkg. Flag	Canister Net Weight	<--- Previous Condition --->	Action Date	Database Updated
161	0009-J MULLANEY	P	0120E	777	P	677	0120E-0-P-0	7/20/92	7/20/92
161	0010-J MULLANEY	P	0124E	577	P	477	0124E-0-P-0	7/20/92	7/20/92
161	0014-J MULLANEY	P	0134E	877	P	777	0134E-0-P-0	7/20/92	7/20/92
161	0015-J MULLANEY	P	0105E	977	P	877	0105E-0-P-0	7/20/92	7/20/92
161	0028-J MULLANEY	P	0105E	954	P	876	0105E-977-P-877	7/20/92	7/20/92
161	0031-J MULLANEY	P	2401E	777	P	577	2401E-0-P-0	7/01/92	7/21/92
161	0037-DM JOHNSON	P	2923E	577	P	75	2923E-0-P-0	7/21/92	7/21/92
161	0047-FK MANGAN1	P	9118	501	P	477	9118-501-P-0	7/21/92	7/21/92
161	0054-J MULLANEY	P	1619E	577	P	477	1619E-0-P-0	7/21/92	7/21/92
162	0087-97504	P	5455E	477	P	377	5455E-0-P-0	8/24/92	8/24/92

Figure A-6

Updated: 1/18/932

Page 1

[illegible]

Figure A-6

Updated: 1/18/932

Page 2

	0	0	0	0	0	0	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	3	4	4	4	4	4	4	5	5	5	5	5	5	6	6	6	6	6	6	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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E3601	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	1	1	1	1	1	2	3	2	2	2	2	2	2	2	1	2	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
E3701	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	1	1	1	2	2	1	1	1	2	1	1	1	1	1	1	2	2	2	2	3	1	1	1	1	1	3	3	1	1	2	2	2	1	2	1	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
E3801	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	2	2	2	3	2	1	1	1	2	2	2	2	3	3	2	2	1	2	1	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
E3901	0	0	0	0	0	0	0	0	3	0	0	0	0	0	1	2	1	1	1	3	3	1	2	2	1	3	1	2	2	1	2	2	2	2	3	2	3	1	2	2	2	2	2	2	1	2	2	2	2	1	1	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
E4001	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2	2	2	2	3	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
E4101	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	1	3	3	2	3	2	2	2	1	1	2	1	3	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
E4201	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	1	3	2	1	3	2	1	2	2	1	2	1	2	1	2	1	3	1	3	0	0	3	0	3	2	2	2	3	3	2	2	2	0	2	1	0	1	1	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
E4301	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	3	3	2	2	2	2	2	2	3	4	2	3	1	2	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
E4401	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	2	2	2	2	2	1	1	2	2	1	1	1	2	2	1	1	2	2	2	1	1	1	2	2	1	2	2	1	2	1	1	1	1	1	1	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
E4501	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	2	2	3	2	3	3	1	2	3	3	2	2	2	1	1	1	1	3	2	2	1	3	3	1	2	2	4	1	2	2	1	1	1	1	1	2	4	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
E4601	0	2	2	1	2	1	2	1	1	2	1	1	3	1	1	3	1	2	1	1	1	1	1	1	3	1	2	2	1	1	1	2	2	2	2	2	1	2	3	3	2	2	2	3	2	2	2	1	2	2	1	3	2	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
E4701	0	2	2	1	0	1	1	0	4	3	2	0	1	0	2	0	1	2	0	2	2	1	1	2	0	2	2	1	2	1	1	1	2	2	2	0	1	1	3	0	2	0	2	0	3	3	0	2	3	0	2	1	1	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
E4801	0	0	2	2	0	0	3	1	1	0	0	0	0	2	3	2	2	1	2	3	2	1	2	1	1	1	1	2	2	2	2	2	2	2	2	1	1	1	1	2	2	0	0	1	2	0	2	1	0	1	0	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
E4901	0	2	2	0	1	0	2	2	1	3	3	0	3	0	2	0	1	2	0	2	2	1	1	0	1	2	1	0	1	0	0	1	1	0	1	1	1	0	1	1	1	0	1	1	2	3	1	1	2	2	2	1	1	2	2	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
E5001	0	3	1	0	1	0	0	0	1	0	0	0	1	0	0	1	2	0	1	1	1	1	1	1	1	0	0	0	1	1	0	2	0	2	0	0	1	1	2	3	1	2	1	2	2	2	1	1	1	1	1	1	1	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
E5101	0	0	2	1	2	1	2	2	2	2	3	2	3	2	3	2	2	1	2	1	1	2	2	1	1	2	2	2	2	2	2	2	2	2	2	2	2	3	2	3	1	2	1	1	3	1	2	2	2	2	1	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
E5201	0	1	1	0	3	3	0	1	0	2	2	1	0	1	1	0	1	1	1	1	0	1	1	1	0	0	1	1	2	0	1	1	0	0	3	3	0	0	0	0	0	1	0	1	2	0	0	0	1	0	1	0	2	0	2	2	1	1	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
E5301	0	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
E5401	0	0	1	0	2	0	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
E5501	0	1	1	1	3	1	1	1	3	1	1	1	1	1	2	1	2	1	1	1	3	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	1	3	3	3	3	1	1	1	2	2	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
E5601	0	1	0	0	2	1	1	1	1	1	1	1	1	1	0	1	0	1	2	0	0	2	0	2	0	2	0	0	0	0	0	0	2	2	0	2	0	2	0	3	0	2	0	2	0	1	0	1	1	0	1	1	0	1	0	2	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
E5701	0	1	1	2	3	2	2	1	1	2	1	2	2	1	1	1	2	1	1	2	2	1	1	2	2	1	1	2	2	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
E5801	0	3	3	3	2	1	1	1	2	2	2	3	2	2	2	2	1	3	3	2	1	3	2	2	2	2	2	2	2	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
E5901	0	3	1	1	1	0	1	3	1	1	2	2	1	2	2	2	1	1	2	2	0	2	2	2	2	2	0	1	2	2	2	2	0	2	1	3	2	2	0	2	0	1	2	1	2	2	0	2	1	1	1	1	1	1	1	1	1	1	1	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
E6001	0	3	2	1	0	1	1	1	1	1	2	2	0	1	0	0	1	1	0	1	1	0	1	1	0	0	1	0	0	1	1	2	0	1	0	0	1	1	2	0	1	0	0	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

4/02/93

K-W Basin, Number of Records per Cubicle

Page 3

[illegible]

Figure A-6

Updated: 1/18/932

Page 4

[illegible]

MAC Version 3.1

UNCLASSIFIED Document

REV 162 Updated: 1/18/93

Report date: 8/05/93

K East Basin Storage Map

Page 1

Fuel Canister Location	Key Date	Fuel Sub Key	Model Type	Number of Fuel Assemblies	Number of Outers	Number of Inner's	Number of Others	Energy MWD's	Canister Serial Number	Pkg. Flag
E0105	2565	D	BE	14	0	0	0	834.45	0105E	P
E0107	2565	C	BE	14	0	0	0	834.45	0107E	P
E0108	2565	D	BE	14	0	0	0	834.45	0108E	P
E0109	2565	B	BE	14	0	0	0	834.48	0109E	P
E0110	2565	C	BE	14	0	0	0	834.45	0110E	P
E0111	2565	D	BE	14	0	0	0	834.45	0111E	P
E0112	2565	D	BE	14	0	0	0	834.45	0112E	P
E0113	2565	D	BE	14	0	0	0	834.45	0113E	P
E0114	2565	D	BE	14	0	0	0	834.45	0114E	P
E0116	2565	C	BE	14	0	0	0	834.45	0116E	P
E0117	2565	B	BE	14	0	0	0	834.47	0117E	P
E0119	2565	D	BE	14	0	0	0	834.45	0119E	P
E0120	2565	B	BE	14	0	0	0	834.46	0120E	P
E0121	2565	D	BE	14	0	0	0	834.45	0121E	P
E0122	2565	C	BE	14	0	0	0	834.45	0122E	P
E0123	2565	B	BE	14	0	0	0	834.46	0123E	P
E0124	2565	D	BE	14	0	0	0	834.45	0124E	P
E0125	2565	C	BE	14	0	0	0	834.45	0125E	P
E0127	2565	D	BE	14	0	0	0	834.45	0127E	P
E0128	2565	C	BE	14	0	0	0	834.45	0128E	P
E0129	2565	D	BE	14	0	0	0	834.44	0129E	P
E0130	2565	B	BE	14	0	0	0	834.46	0130E	P
E0131	2565	C	BE	14	0	0	0	834.45	0131E	P
E0132	2565	D	BE	14	0	0	0	834.45	0132E	P
E0134	2565	B	BE	14	0	0	0	834.46	0134E	P
E0135	2565	C	BE	14	0	0	0	834.45	0135E	P
E0136	2565	D	BE	14	0	0	0	834.45	0136E	P
E0137	2565	B	BE	14	0	0	0	834.47	0137E	P
E0138	2565	D	BE	14	0	0	0	834.45	0138E	P
E0139	2565	C	BE	14	0	0	0	834.45	0139E	P
E0140	2565	D	BE	14	0	0	0	834.45	0140E	P
E0142	2565	B	BE	14	0	0	0	834.47	0142E	P
E0143	2565	D	BE	14	0	0	0	834.45	0143E	P
E0144	2565	C	BE	14	0	0	0	834.45	0144E	P
E0145	2565	D	BE	14	0	0	0	834.45	0145E	P
E0146	2565	C	BE	14	0	0	0	834.46	0146E	P
E0148	2565	B	BE	14	0	0	0	834.47	0148E	P
E0149	2565	D	BE	14	0	0	0	834.45	0149E	P
E0150	2565	D	BE	14	0	0	0	834.44	0150E	P
E0151	2565	C	BE	11	0	0	0	655.64	0151E	P
E0151	2565	C	BS	3	0	0	0	161.80	0151E	P
E0152	2565	B	BE	12	0	0	0	715.26	0152E	P
E0152	2565	B	BS	2	0	0	0	107.87	0152E	P
E0153	2565	D	BE	14	0	0	0	834.45	0153E	P
E0155	2565	D	BE	14	0	0	0	834.45	0155E	P
E0156	2565	D	BE	14	0	0	0	834.45	0156E	P

MAC Version 3.1

UNCLASSIFIED Document

REV 162 Updated: 1/18/93

Report date: 8/05/93

K East Basin Storage Map

Page 2

Fuel Canister Location	Key Date	Sub Key	Fuel Model Type	Number of Fuel Assemblies	Number of Outers	Number of Inners	Number of Others	Energy MWD's	Canister Serial Number	Pkg. Flag
E0157	2565	C	BE	14	0	0	0	834.46	0157E	P
E0158	2565	B	BE	14	0	0	0	834.47	0158E	P
E0159	2565	D	BE	14	0	0	0	834.45	0159E	P
E0160	2565	C	BE	14	0	0	0	834.45	0160E	P
E0161	2565	B	BA	1	0	0	0	54.98	0161E	P
E0161	2565	B	BE	13	0	0	0	774.86	0161E	P
E0163	2565	C	BA	1	0	0	0	54.98	0163E	P
E0163	2565	C	BE	12	0	0	0	715.24	0163E	P
E0163	2565	C	BS	1	0	0	0	53.93	0163E	P
E0165	2565	B	BA	1	0	0	0	54.98	0165E	P
E0165	2565	B	BE	6	0	0	0	357.63	0165E	P
E0165	2565	B	BS	7	0	0	0	377.55	0165E	P
E0166	2565	C	BA	1	0	0	0	54.97	0166E	P
E0166	2565	C	BE	7	0	0	0	417.23	0166E	P
E0166	2565	C	BS	6	0	0	0	323.61	0166E	P
E0167	2565	C	BE	13	0	0	0	774.85	0167E	P
E0167	2565	C	BS	1	0	0	0	53.94	0167E	P
E0169	2565	B	BE	13	0	0	0	774.86	0169E	P
E0169	2565	B	BS	1	0	0	0	53.94	0169E	P
E0172	2565	C	BE	14	0	0	0	834.45	0172E	P
E0174	2565	B	BE	14	0	0	0	834.47	0174E	P
E0303	2639	C	BE	14	0	0	0	766.22	0303E	P
E0304	2639	B	BE	14	0	0	0	766.21	0304E	P
E0305	2639	C	BE	14	0	0	0	766.21	0305E	P
E0306	2639	D	BE	14	0	0	0	766.21	0306E	P
E0307	2639	B	BE	14	0	0	0	766.21	0307E	P
E0308	2639	C	BE	14	0	0	0	766.21	0308E	P
E0309	2639	B	BE	14	0	0	0	766.21	0309E	P
E0310	2639	D	BE	14	0	0	0	766.22	0310E	P
E0311	2639	C	BE	13	1	0	0	747.98	0311E	P
E0312	2639	B	BE	14	0	0	0	766.21	0312E	P
E0313	2639	C	BE	14	0	0	0	766.21	0313E	P
E0314	2639	D	BE	14	0	0	0	766.21	0314E	P
E0315	2639	C	BE	13	0	0	0	711.49	0315E	P
E0315	2639	C	BS	1	0	0	0	62.16	0315E	P
E0316	2639	B	BE	14	0	0	0	766.21	0316E	P
E0317	2639	D	BE	12	0	0	0	656.76	0317E	P
E0317	2639	D	BS	2	0	0	0	124.31	0317E	P
E0318	2201	D	BE	6	0	0	0	339.47	0318E	P
E0318	2201	D	BS	8	0	0	0	484.70	0318E	P
E0319	2201	B	BE	10	0	0	0	565.78	0319E	P
E0319	2201	B	BS	4	0	0	0	242.35	0319E	P
E0320	2201	D	BE	7	0	0	0	396.05	0320E	P
E0320	2201	D	BS	5	0	0	0	302.94	0320E	P
E0321	2639	B	BE	13	0	0	0	711.44	0321E	P
E0321	2639	B	BS	1	0	0	0	62.16	0321E	P

MAC Version 3.1

UNCLASSIFIED Document

REV 162 Updated: 1/18/93

Report date: 8/05/93

K East Basin Storage Map

Page 3

Fuel Canister Location	Key Date	Sub Key	Fuel Model Type	Number of Fuel Assemblies	Number of Outers	Number of Inners	Number of Others	Energy MWD's	Canister Serial Number	Pkg. Flag
E0322	2639	D	BE	14	0	0	0	766.18	0322E	P
E0337	0832	B	BE	14	0	0	0	784.63	0337E	P
E0338	0832	C	BE	14	0	0	0	784.63	0338E	P
E0339	1540	B	AB	3	0	0	0	83.03	0339E	P
E0339	1540	B	BE	11	0	0	0	158.01	0339E	P
E0340	0832	D	BE	4	0	0	0	224.18	0340E	P
E0340	0832	D	BS	8	0	0	0	460.89	0340E	P
E0341	0832	B	BE	10	0	0	0	560.47	0341E	P
E0341	0832	B	BS	4	0	0	0	230.44	0341E	P
E0342	0832	C	BE	10	0	0	0	560.46	0342E	P
E0342	0832	C	BS	4	0	0	0	230.44	0342E	P
E0343	0832	D	BE	7	0	0	0	392.32	0343E	P
E0343	0832	D	BS	5	0	0	0	288.05	0343E	P
E0344	0832	C	BE	9	0	0	0	504.41	0344E	P
E0344	0832	C	BS	5	0	0	0	288.05	0344E	P
E0345	0832	B	BE	10	0	0	0	560.45	0345E	P
E0345	0832	B	BS	4	0	0	0	230.44	0345E	P
E0346	0832	C	BE	4	0	0	0	224.18	0346E	P
E0346	0832	C	BS	10	0	0	0	576.11	0346E	P
E0347	1540	B	AB	8	0	0	0	221.42	0347E	P
E0347	1540	B	BE	6	0	0	0	86.18	0347E	P
E0348	0832	D	BE	7	0	0	0	392.32	0348E	P
E0348	0832	D	BS	5	0	0	0	288.05	0348E	P
E0349	0832	C	BE	14	0	0	0	784.65	0349E	P
E0350	0832	B	BE	14	0	0	0	784.64	0350E	P
E0351	0832	D	BE	14	0	0	0	784.65	0351E	P
E0352	0832	C	BE	14	0	0	0	784.63	0352E	P
E0353	0832	C	BE	14	0	0	0	784.65	0353E	P
E0354	0832	C	BE	14	0	0	0	784.63	0354E	P
E0355	0832	B	BE	14	0	0	0	784.64	0355E	P
E0356	0832	C	BE	14	0	0	0	784.65	0356E	P
E0357	0832	C	BC	2	0	0	0	58.31	0357E	P
E0357	0832	C	BE	12	0	0	0	672.55	0357E	P
E0358	0832	D	BC	2	0	0	0	58.30	0358E	P
E0358	0832	D	BE	7	0	0	0	392.32	0358E	P
E0358	0832	D	BS	5	0	0	0	288.05	0358E	P
E0359	0832	B	BE	7	0	0	0	204.09	0359E	P
E0359	0832	B	BE	6	0	0	0	336.28	0359E	P
E0359	0832	B	BS	1	0	0	0	57.61	0359E	P
E0360	1540	B	AB	3	0	0	0	83.04	0360E	P
E0360	1540	B	BE	10	0	1	0	148.43	0360E	P
E0360	1540	B	BS	0	1	0	0	41.71	0360E	P
E0361	0832	C	BA	2	0	0	0	101.98	0361E	P
E0361	0832	C	BC	8	0	0	0	233.24	0361E	P
E0361	0832	C	BE	4	0	0	0	224.18	0361E	P
E0362	0832	B	BC	2	0	0	0	58.31	0362E	P

MAC Version 3.1

UNCLASSIFIED Document

REV 162 Updated: 1/18/93

Report date: 8/05/93

K East Basin Storage Map

Page 4

Fuel Canister Location	Key Date	Sub Key	Fuel Model Type	Number of Fuel Assemblies	Number of Outers	Number of Inners	Number of Others	Energy MWD's	Canister Serial Number	Pkg. Flag
E0362	0832	B	BE	7	0	0	0	392.32	0362E	P
E0362	0832	B	BS	5	0	0	0	288.05	0362E	P
E0363	0832	C	BE	13	0	0	0	728.59	0363E	P
E0363	0832	C	BS	1	0	0	0	57.61	0363E	P
E0364	0832	D	BC	1	0	0	0	29.16	0364E	P
E0364	0832	D	BE	11	0	0	0	616.51	0364E	P
E0365	0770	D	BE	13	0	0	0	783.24	0365E	P
E0365	0770	D	BS	1	0	0	0	57.07	0365E	P
E0366	1540	B	BE	14	0	0	0	201.10	0366E	P
E0367	1540	B	BE	14	0	0	0	201.10	0367E	P
E0368	0770	D	BC	2	0	0	0	54.52	0368E	P
E0368	0770	D	BE	6	0	0	0	361.50	0368E	P
E0368	0770	D	BS	6	0	0	0	342.44	0368E	P
E0369	1540	B	BE	14	0	0	0	201.10	0369E	P
E0370	1540	B	BE	14	0	0	0	201.10	0370E	P
E0371	0770	B	BC	4	0	0	0	109.08	0371E	P
E0371	0770	B	BE	6	0	0	0	361.50	0371E	P
E0371	0770	B	BS	4	0	0	0	228.30	0371E	P
E0372	0832	C	BE	12	0	0	0	672.54	0372E	P
E0372	0832	C	BS	2	0	0	0	115.22	0372E	P
E0373	0770	D	BE	11	0	0	0	662.75	0373E	P
E0373	0770	D	BS	3	0	0	0	171.22	0373E	P
E0401	9621		CE	0	0	0	21	0.00	0401E	
E0401	9621		KO	0	0	0	1	0.00	0401E	
E0401	9621		ON	0	0	0	2	0.00	0401E	
E0406	2480	D	BE	12	0	0	0	720.29	0406E	P
E0406	2480	D	BS	2	0	0	0	125.22	0406E	P
E0407	2480	C	BE	11	0	0	0	660.24	0407E	P
E0407	2480	C	BS	3	0	0	0	187.83	0407E	P
E0408	2480	D	BE	12	0	0	0	720.33	0408E	P
E0408	2480	D	BS	2	0	0	0	125.22	0408E	P
E0409	2480	B	BE	9	0	0	0	540.19	0409E	P
E0409	2480	B	BS	5	0	0	0	313.05	0409E	P
E0411	2480	D	BE	11	0	0	0	660.27	0411E	P
E0411	2480	D	BS	3	0	0	0	187.83	0411E	P
E0412	2480	C	BE	10	0	0	0	600.22	0412E	P
E0412	2480	C	BS	4	0	0	0	250.44	0412E	P
E0413	2480	C	BE	10	0	0	0	600.23	0413E	P
E0413	2480	C	BS	4	0	0	0	250.44	0413E	P
E0414	2480	B	BE	9	0	0	0	540.19	0414E	P
E0414	2480	B	BS	5	0	0	0	313.05	0414E	P
E0415	2480	C	BE	5	0	0	0	300.11	0415E	P
E0415	2480	C	BS	9	0	0	0	563.49	0415E	P
E0416	2480	D	BE	11	0	0	0	660.29	0416E	P
E0416	2480	D	BS	3	0	0	0	187.83	0416E	P
E0418	2480	D	BE	9	0	0	0	540.25	0418E	P

MAC Version 3.1

UNCLASSIFIED Document

REV 162 Updated: 1/18/93

Report date: 8/05/93

K East Basin Storage Map

Page 5

Fuel Canister Location	Key Date	Fuel Sub Key	Fuel Model Type	Number of Fuel Assemblies	Number of Outers	Number of Inners	Number of Others	Energy MWD's	Canister Serial Number	Pkg. Flag
E0418	2480	D	BS	5	0	0	0	313.05	0418E	P
E0419	2480	B	BE	6	0	0	0	360.13	0419E	P
E0419	2480	B	BS	8	0	0	0	500.88	0419E	P
E0420	2480	C	BE	7	0	0	0	420.16	0420E	P
E0420	2480	C	BS	7	0	0	0	438.27	0420E	P
E0421	2480	B	BE	11	0	0	0	660.24	0421E	P
E0421	2480	B	BS	3	0	0	0	187.83	0421E	P
E0422	2480	D	BE	6	0	0	0	360.17	0422E	P
E0422	2480	D	BS	8	0	0	0	500.88	0422E	P
E0424	2480	C	BE	14	0	0	0	840.31	0424E	P
E0425	2480	D	BE	14	0	0	0	840.35	0425E	P
E0426	2480	B	BE	14	0	0	0	840.30	0426E	P
E0427	2480	C	BE	14	0	0	0	840.33	0427E	P
E0428	2480	D	BE	14	0	0	0	840.37	0428E	P
E0429	2480	B	BE	14	0	0	0	840.30	0429E	P
E0431	2480	C	BE	13	0	0	0	780.30	0431E	P
E0431	2480	C	BS	1	0	0	0	62.61	0431E	P
E0432	2480	D	BE	10	0	0	0	600.26	0432E	P
E0432	2480	D	BS	4	0	0	0	250.44	0432E	P
E0433	2480	B	BE	8	0	0	0	480.17	0433E	P
E0433	2480	B	BS	6	0	0	0	375.66	0433E	P
E0434	2480	D	BE	11	0	0	0	660.27	0434E	P
E0434	2480	D	BS	3	0	0	0	187.83	0434E	P
E0435	2480	C	BE	11	0	0	0	660.25	0435E	P
E0435	2480	C	BS	3	0	0	0	187.83	0435E	P
E0436	2480	D	BE	10	0	0	0	600.27	0436E	P
E0436	2480	D	BS	4	0	0	0	250.44	0436E	P
E0437	2480	C	BE	10	0	0	0	600.24	0437E	P
E0437	2480	C	BS	4	0	0	0	250.44	0437E	P
E0438	2480	B	BE	9	0	0	0	540.19	0438E	P
E0438	2480	B	BS	5	0	0	0	313.05	0438E	P
E0439	2480	D	BE	14	0	0	0	840.37	0439E	P
E0440	2480	C	BE	13	0	0	0	780.30	0440E	P
E0440	2480	C	BS	1	0	0	0	62.61	0440E	P
E0441	2480	D	BE	14	0	0	0	840.37	0441E	P
E0443	2480	B	BE	13	0	0	0	780.28	0443E	P
E0443	2480	B	BS	1	0	0	0	62.61	0443E	P
E0444	2480	C	BE	14	0	0	0	840.33	0444E	P
E0445	2480	D	BE	14	0	0	0	840.35	0445E	P
E0446	2480	B	BE	14	0	0	0	840.28	0446E	P
E0447	2480	D	BE	14	0	0	0	840.38	0447E	P
E0448	2480	C	BE	14	0	0	0	840.33	0448E	P
E0450	2285	D	BE	11	0	0	0	671.35	0450E	P
E0450	2285	D	BS	3	0	0	0	190.07	0450E	P
E0451	2285	C	BE	14	0	0	0	854.44	0451E	P
E0452	2285	B	BE	14	0	0	0	854.44	0452E	P

MAC Version 3.1

UNCLASSIFIED Document WHC-IP-0069 REV 162 Updated: 1/18/93

Report Date 8/05/93

KE Basin Metal Storage
& Bucket Details

WESTINGHOUSE HANFORD COMPANY
Fuel Metal Accountability
100 Areas

Page 1

Cubicle	Can. No.	Key Date	Sub Key	Fuel Type	Unirradiated Enrichment		Length (in)	N u m b e r s of				* Pounds	Metric Tons	Energy (MWD's)
					Outer	Inner		Asm	Out	Inn	Pcs			
E4168	4168E	0001	B09X09A	0.947	0.947	23.0	0	0	1	0	14.64	.007	0.00	
Totals for key date 0001 subkey fuel model BA							0	0	1	0	14.64	.007	0.00	
E4168	4168E	0001	B09X09C	0.947	0.947	17.0	2	2	0	0	114.58	.052	0.00	
Totals for key date 0001 subkey fuel model BC							2	2	0	0	114.58	.052	0.00	
E4165	4165E	0001	B09X09E	0.947	0.947	26.0	0	0	4	0	66.00	.030	79.00	
Totals for key date 0001 subkey fuel model BE							0	0	4	0	66.00	.030	79.00	
E4165	4165E	0001	B09X09S	0.947	0.947	24.5	0	1	0	0	32.98	.015	40.70	
E4165	4165E	0001	B09X09S	0.947	0.947	24.5	0	0	5	0	77.60	.035	101.60	
Totals for key date 0001 subkey fuel model BS							0	1	5	0	110.58	.050	142.30	
Totals for key date: 0001							2	3	10	0	305.80	.139	221.30	
E6163	6163E	0201	D A09N09A	0.947	0.947	23.2	8	0	0	0	326.40	.148	234.30	
E6165	6165E	0201	D A09N09A	0.947	0.947	23.2	12	0	0	0	489.60	.223	359.86	
E6166	6166E	0201	D A09N09A	0.947	0.947	23.2	10	0	0	0	408.00	.185	292.87	
E6167	6167E	0201	D A09N09A	0.947	0.947	23.2	3	0	0	0	122.40	.056	86.49	
E6367	6367E	0201	D A09N09A	0.947	0.947	23.2	5	0	0	0	204.00	.093	146.44	
E6368	6368E	0201	D A09N09A	0.947	0.947	23.2	1	0	0	0	40.80	.019	29.99	
E6369	6369E	0201	D A09N09A	0.947	0.947	23.2	11	0	0	0	448.80	.204	322.18	
E6370	6370E	0201	D A09N09A	0.947	0.947	23.2	9	0	0	0	367.20	.167	263.60	
E6371	6371E	0201	D A09N09A	0.947	0.947	23.2	11	0	0	0	448.80	.204	329.87	
E6372	6372E	0201	D A09N09A	0.947	0.947	23.2	12	0	0	0	489.60	.223	351.47	
E6373	6373E	0201	D A09N09A	0.947	0.947	23.2	3	0	0	0	122.40	.056	87.87	

* Weights are based on unirradiated factor weights

MAC Version 3.1

UNCLASSIFIED Document WHC-IP-0069 REV 162 Updated: 1/18/93

Report Date 8/05/93

KE Basin Metal Storage
& Bucket Details

WESTINGHOUSE HANFORD COMPANY
Fuel Metal Accountability
100 Areas

Page 2

Cubicle	Can. No.	Key Date	Sub Key Type	Fuel Type	Unirradiated Enrichment		Length (in)	Numbers of				* Pounds	Metric Tons	Energy (MWD's)
					Outer	Inner		Asm	Out	Inn	Pcs			
Totals for key date 0201 subkey D fuel model AA								85	0	0	0	3468.00	1.576	2504.94
E6163	6163E	0201	D	B09X09E	0.947	0.947	26.0	1	0	0	0	51.60	.023	35.70
E6166	6166E	0201	D	B09X09E	0.947	0.947	26.0	2	0	0	0	103.20	.047	71.39
E6167	6167E	0201	D	B09X09E	0.947	0.947	26.0	6	0	0	0	309.60	.141	216.99
E6367	6367E	0201	D	B09X09E	0.947	0.947	26.0	3	0	0	0	154.80	.070	107.09
E6368	6368E	0201	D	B09X09E	0.947	0.947	26.0	4	0	0	0	206.40	.094	142.78
E6370	6370E	0201	D	B09X09E	0.947	0.947	26.0	2	0	0	0	103.20	.047	71.40
E6371	6371E	0201	D	B09X09E	0.947	0.947	26.0	1	0	0	0	51.60	.023	35.70
E6373	6373E	0201	D	B09X09E	0.947	0.947	26.0	4	0	0	0	206.40	.094	142.80
Totals for key date 0201 subkey D fuel model BE								23	0	0	0	1186.80	.539	823.85
E6163	6163E	0201	D	B09X09S	0.947	0.947	24.5	3	0	0	0	145.50	.066	117.13
E6167	6167E	0201	D	B09X09S	0.947	0.947	24.5	3	0	0	0	145.50	.066	117.15
E6367	6367E	0201	D	B09X09S	0.947	0.947	24.5	4	0	0	0	194.00	.088	156.18
E6368	6368E	0201	D	B09X09S	0.947	0.947	24.5	7	0	0	0	339.50	.154	273.31
E6369	6369E	0201	D	B09X09S	0.947	0.947	24.5	1	0	0	0	48.50	.022	39.04
E6373	6373E	0201	D	B09X09S	0.947	0.947	24.5	5	0	0	0	242.50	.110	195.22
Totals for key date 0201 subkey D fuel model BS								23	0	0	0	1115.50	.507	898.03
Totals for key date: 0201								131	0	0	0	5770.30	2.623	4226.82
E5725	5725E	0259	B	A09N09A	0.947	0.947	23.2	0	0	1	0	13.59	.006	10.19
Totals for key date 0259 subkey B fuel model AA								0	0	1	0	13.59	.006	10.19
E5729	5729E	0259	D	A09N09A	0.947	0.947	23.2	4	0	0	0	163.20	.074	122.44

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MAC Version 3.1

UNCLASSIFIED Document WHC-IP-0069 REV 162 Updated: 1/18/93

Report Date 8/05/93

KE Basin Metal Storage
& Bucket Details

WESTINGHOUSE HANFORD COMPANY
Fuel Metal Accountability
100 Areas

Page 3

Cubicle	Can. No.	Key Date	Sub Key	Fuel Type	Unirradiated Enrichment		Length (in)	Numbers of				* Pounds	Metric Tons	Energy (MWD's)
					Outer	Inner		Asm	Out	Inn	Pcs			
Totals for key date 0259 subkey D fuel model AA								4	0	0	0	163.20	.074	122.44
E5704	5704E	0259	B	B09X09C	0.947	0.947	17.0	0	0	1	0	10.91	.005	5.81
E5705	5705E	0259	B	B09X09C	0.947	0.947	17.0	0	0	1	0	10.91	.005	5.81
E5705	5705E	0259	B	B09X09C	0.947	0.947	17.0	3	0	0	0	102.30	.046	52.35
E5707	5707E	0259	B	B09X09C	0.947	0.947	17.0	1	0	0	0	34.10	.015	17.45
E5708	5708E	0259	B	B09X09C	0.947	0.947	17.0	8	0	0	0	272.80	.124	139.60
E5709	5709E	0259	B	B09X09C	0.947	0.947	17.0	14	0	0	0	477.40	.217	244.31
E5711	5711E	0259	B	B09X09C	0.947	0.947	17.0	6	2	0	0	250.98	.114	127.98
E5713	5713E	0259	B	B09X09C	0.947	0.947	17.0	1	0	0	0	34.10	.015	17.45
E5714	5714E	0259	B	B09X09C	0.947	0.947	17.0	7	0	0	0	238.70	.108	122.15
E5715	5715E	0259	B	B09X09C	0.947	0.947	17.0	3	1	0	0	125.49	.057	63.99
E5719	5719E	0259	B	B09X09C	0.947	0.947	17.0	4	0	0	0	136.40	.062	69.80
E5721	5721E	0259	B	B09X09C	0.947	0.947	17.0	14	0	0	0	477.40	.217	244.31
E5723	5723E	0259	B	B09X09C	0.947	0.947	17.0	7	0	3	0	271.43	.123	139.59
E5728	5728E	0259	B	B09X09C	0.947	0.947	17.0	8	0	1	0	283.71	.129	145.42
E5731	5731E	0259	B	B09X09C	0.947	0.947	17.0	8	0	1	0	283.71	.129	145.42
E5733	5733E	0259	B	B09X09C	0.947	0.947	17.0	5	0	0	0	170.50	.077	87.25
E5737	5737E	0259	B	B09X09C	0.947	0.947	17.0	0	0	1	0	10.91	.005	5.81
E5739	5739E	0259	B	B09X09C	0.947	0.947	17.0	2	0	0	0	68.20	.031	34.90
E5741	5741E	0259	B	B09X09C	0.947	0.947	17.0	2	1	0	0	91.39	.042	46.54
E5742	5742E	0259	B	B09X09C	0.947	0.947	17.0	13	0	0	0	443.30	.202	226.86
E5745	5745E	0259	B	B09X09C	0.947	0.947	17.0	13	0	1	0	454.21	.206	232.67
E5747	5747E	0259	B	B09X09C	0.947	0.947	17.0	1	0	0	0	34.10	.015	17.45
E5749	5749E	0259	B	B09X09C	0.947	0.947	17.0	1	0	0	0	34.10	.015	17.45
E5750	5750E	0259	B	B09X09C	0.947	0.947	17.0	14	0	0	0	477.40	.217	244.31
Totals for key date 0259 subkey B fuel model BC								135	4	9	0	4794.45	2.179	2454.68
E5738	5738E	0259	D	B09X09C	0.947	0.947	17.0	1	0	0	0	34.10	.015	17.45

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MAC Version 3.1

UNCLASSIFIED Document WHC-IP-0069 REV 162 Updated: 1/18/93

Report Date 8/05/93

KE Basin Metal Storage
& Bucket Details

WESTINGHOUSE HANFORD COMPANY
Fuel Metal Accountability
100 Areas

Page 4

Cubicle	Can. No.	Key Date	Sub Key	Fuel Type	Unirradiated Enrichment		Length (in)	Numbers of				Pounds	Metric Tons	Energy (MWD's)
					Outer	Inner		Asm	Out	Inn	Pcs			
Totals for key date 0259 subkey D fuel model BC								====	====	====	=====	=====	=====	
							1	0	0	0	34.10	.015	17.45	
E5704	5704E	0259	B	B09X09E	0.947	0.947	26.0	13	1	0	0	705.90	.321	572.66
E5705	5705E	0259	B	B09X09E	0.947	0.947	26.0	10	1	0	0	551.10	.251	446.96
E5707	5707E	0259	B	B09X09E	0.947	0.947	26.0	13	0	0	0	670.80	.305	544.72
E5708	5708E	0259	B	B09X09E	0.947	0.947	26.0	6	0	0	0	309.60	.141	251.41
E5711	5711E	0259	B	B09X09E	0.947	0.947	26.0	6	0	2	0	342.60	.156	279.31
E5713	5713E	0259	B	B09X09E	0.947	0.947	26.0	13	0	0	0	670.80	.305	544.72
E5714	5714E	0259	B	B09X09E	0.947	0.947	26.0	7	0	0	0	361.20	.164	293.31
E5715	5715E	0259	B	B09X09E	0.947	0.947	26.0	10	0	1	0	532.50	.242	432.97
E5716	5716E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.62
E5717	5717E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.62
E5719	5719E	0259	B	B09X09E	0.947	0.947	26.0	10	0	0	0	516.00	.235	419.02
E5722	5722E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.61
E5723	5723E	0259	B	B09X09E	0.947	0.947	26.0	4	3	0	0	311.70	.142	251.45
E5725	5725E	0259	B	B09X09E	0.947	0.947	26.0	13	1	0	0	705.90	.321	572.68
E5726	5726E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.62
E5727	5727E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.62
E5728	5728E	0259	B	B09X09E	0.947	0.947	26.0	5	1	0	0	293.10	.133	237.46
E5730	5730E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.62
E5731	5731E	0259	B	B09X09E	0.947	0.947	26.0	5	1	0	0	293.10	.133	237.46
E5732	5732E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.62
E5733	5733E	0259	B	B09X09E	0.947	0.947	26.0	9	0	0	0	464.40	.211	377.12
E5734	5734E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.61
E5735	5735E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.62
E5736	5736E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.62
E5737	5737E	0259	B	B09X09E	0.947	0.947	26.0	13	1	0	0	705.90	.321	572.67
E5739	5739E	0259	B	B09X09E	0.947	0.947	26.0	12	0	0	0	619.20	.281	502.82
E5740	5740E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.61
E5741	5741E	0259	B	B09X09E	0.947	0.947	26.0	11	0	1	0	584.10	.266	474.87
E5742	5742E	0259	B	B09X09E	0.947	0.947	26.0	1	0	0	0	51.60	.023	41.90

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MAC Version 3.1

UNCLASSIFIED Document WHC-IP-0069 REV 162 Updated: 1/18/93

Report Date 8/05/93

KE Basin Metal Storage
& Bucket Details

WESTINGHOUSE HANFORD COMPANY
Fuel Metal Accountability
100 Areas

Page 5

Cubicle	Can. No.	Key Date	Sub Key	Fuel Type	Unirradiated Enrichment		Length (in)	Numbers of				* Pounds	* Metric Tons	Energy (MWD's)
					Outer	Inner		Asm	Out	Inn	Pcs			
E5743	5743E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.61
E5744	5744E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.61
E5745	5745E	0259	B	B09X09E	0.947	0.947	26.0	0	1	0	0	35.10	.016	27.95
E5746	5746E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.61
E5747	5747E	0259	B	B09X09E	0.947	0.947	26.0	13	0	0	0	670.80	.305	544.72
E5748	5748E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.63
E5749	5749E	0259	B	B09X09E	0.947	0.947	26.0	13	0	0	0	670.80	.305	544.72
E5751	5751E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.61
E5752	5752E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.61
E5753	5753E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.62
E5754	5754E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.62
E5755	5755E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.61
E5756	5756E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.62
E5757	5757E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.62
E5758	5758E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.61
E5759	5759E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.62
E5760	5760E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.62
E5761	5761E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.61
E5762	5762E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.61
E5763	5763E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.61
E5764	5764E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.62
E5765	5765E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.62
E5766	5766E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.62
E5767	5767E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.61
E5768	5768E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.62
E5769	5769E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.62
E5770	5770E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.61
E5771	5771E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.61
E5772	5772E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.61
E5904	5904E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.61
E5905	5905E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.61
E5907	5907E	0259	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	586.61

* Weights are based on unirradiated factor weights

MAC Version 3.1

UNCLASSIFIED Document WHC-IP-0069 REV 162 Updated: 1/18/93

Report Date 8/05/93

KE Basin Metal Storage
& Bucket Details

WESTINGHOUSE HANFORD COMPANY
Fuel Metal Accountability
100 Areas

Page 6

Cubicle	Can. No.	Key Date	Sub Key	Fuel Type	Unirradiated Enrichment		Length (in)	N u m b e r s of				* Pounds	Metric Tons	Energy (MWD's)
					Outer	Inner		Asm	Out	Inn	Pcs			
Totals for key date 0259 subkey B fuel model BE								747	10	4	0	38962.20	17.710	31635.51
E5729	5729E	0259 D	B09X09E	0.947	0.947	26.0	8	0	0	0	412.80	.188	335.21	
E5738	5738E	0259 D	B09X09E	0.947	0.947	26.0	11	0	0	0	567.60	.258	460.92	
Totals for key date 0259 subkey D fuel model BE								19	0	0	0	980.40	.446	796.13
Totals for key date: 0259								906	14	14	0	44947.94	20.431	35036.40
E5508	5508E	0294 B	A09N09A	0.947	0.947	23.2	1	0	0	0	40.80	.019	27.17	
Totals for key date 0294 subkey B fuel model AA								1	0	0	0	40.80	.019	27.17
E5505	5505E	0294 B	A07N07B	0.711	0.711	20.0	1	0	0	0	36.00	.016	19.00	
E5508	5508E	0294 B	A07N07B	0.711	0.711	20.0	1	0	2	0	59.98	.027	31.66	
E5537	5537E	0294 B	A07N07B	0.711	0.711	20.0	0	0	1	0	11.99	.005	6.33	
Totals for key date 0294 subkey B fuel model AB								2	0	3	0	107.97	.049	56.99
E5055	5055E	0294 D	A07N07B	0.711	0.711	20.0	0	1	0	0	24.01	.011	12.67	
Totals for key date 0294 subkey D fuel model AB								0	1	0	0	24.01	.011	12.67
E5022	5022E	0294 B	B09X09C	0.947	0.947	17.0	5	1	0	0	193.69	.088	99.52	
E5038	5038E	0294 B	B09X09C	0.947	0.947	17.0	2	1	0	0	91.39	.042	46.84	
E5044	5044E	0294 B	B09X09C	0.947	0.947	17.0	6	0	0	0	204.60	.093	105.37	
E5059	5059E	0294 B	B09X09C	0.947	0.947	17.0	3	2	0	0	148.68	.068	76.11	
E5063	5063E	0294 B	B09X09C	0.947	0.947	17.0	3	2	0	0	148.68	.068	76.12	
E5065	5065E	0294 B	B09X09C	0.947	0.947	17.0	3	2	0	0	148.68	.068	76.11	
E5071	5071E	0294 B	B09X09C	0.947	0.947	17.0	9	1	0	0	330.09	.150	169.77	
E5305	5305E	0294 B	B09X09C	0.947	0.947	17.0	2	0	0	0	68.20	.031	35.13	

* Weights are based on unirradiated factor weights

MAC Version 3.1

UNCLASSIFIED Document WHC-IP-0069 REV 162 Updated: 1/18/93

Report Date 8/05/93

KE Basin Metal Storage
& Bucket Details

WESTINGHOUSE HANFORD COMPANY
Fuel Metal Accountability
100 Areas

Page 7

Cubicle	Can. No.	Key Date	Sub Key	Fuel Type	Unirradiated Enrichment		Length (in)	Numbers of				* Pounds	* Metric Tons	Energy (MWD's)
					Outer	Inner		Asm	Out	Inn	Pcs			
E5332	5332E	0294	B	B09X09C	0.947	0.947	17.0	3	0	4	0	145.94	.066	76.08
E5336	5336E	0294	B	B09X09C	0.947	0.947	17.0	2	0	0	0	68.20	.031	35.12
E5338	5338E	0294	B	B09X09C	0.947	0.947	17.0	9	0	0	0	306.90	.140	158.06
E5340	5340E	0294	B	B09X09C	0.947	0.947	17.0	3	0	0	0	102.30	.046	52.69
E5342	5342E	0294	B	B09X09C	0.947	0.947	17.0	1	0	0	0	34.10	.015	17.56
E5344	5344E	0294	B	B09X09C	0.947	0.947	17.0	2	1	0	0	91.39	.042	46.84
E5505	5505E	0294	B	B09X09C	0.947	0.947	17.0	4	0	0	0	136.40	.062	70.25
E5523	5523E	0294	B	B09X09C	0.947	0.947	17.0	4	0	0	0	136.40	.062	70.25
E5530	5530E	0294	B	B09X09C	0.947	0.947	17.0	0	0	1	0	10.91	.005	5.85
Totals for key date 0294 subkey B fuel model BC								61	10	5	0	2366.55	1.076	1217.67
E5025	5025E	0294	C	B09X09C	0.947	0.947	17.0	0	0	1	0	10.91	.005	5.84
E5053	5053E	0294	C	B09X09C	0.947	0.947	17.0	0	0	3	0	32.73	.015	17.55
E5327	5327E	0294	C	B09X09C	0.947	0.947	17.0	0	0	1	0	10.91	.005	5.03
Totals for key date 0294 subkey C fuel model BC								0	0	5	0	54.55	.025	28.42
E5055	5055E	0294	D	B09X09C	0.947	0.947	17.0	2	0	0	0	68.20	.031	78.09
E5511	5511E	0294	D	B09X09C	0.947	0.947	17.0	4	0	0	0	136.40	.062	60.42
Totals for key date 0294 subkey D fuel model BC								6	0	0	0	204.60	.093	138.51
E5021	5021E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.64
E5022	5022E	0294	B	B09X09E	0.947	0.947	26.0	8	0	1	0	429.30	.195	311.68
E5024	5024E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.65
E5026	5026E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.65
E5027	5027E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.65
E5028	5028E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.65
E5029	5029E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.65
E5031	5031E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.65
E5035	5035E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.65

* Weights are based on unirradiated factor weights

MAC Version 3.1

UNCLASSIFIED Document WHC-IP-0069 REV 162 Updated: 1/18/93

Report Date 8/05/93

KE Basin Metal Storage
& Bucket Details

WESTINGHOUSE HANFORD COMPANY
Fuel Metal Accountability
100 Areas

Page 8

Cubicle	Can. No.	Key Date	Sub Key	Fuel Type	Unirradiated Enrichment		Length (in)	N u m b e r s of				* Pounds	* Metric Tons	Energy (MWD's)
					Outer	Inner		Asm	Out	Inn	Pcs			
E5036	5036E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.65
E5038	5038E	0294	B	B09X09E	0.947	0.947	26.0	11	0	1	0	584.10	.266	423.89
E5040	5040E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.65
E5041	5041E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.65
E5044	5044E	0294	B	B09X09E	0.947	0.947	26.0	8	0	0	0	412.80	.188	299.23
E5046	5046E	0294	B	B09X09E	0.947	0.947	26.0	11	1	0	0	602.70	.274	436.39
E5051	5051E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.65
E5052	5052E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.65
E5054	5054E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.64
E5056	5056E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.65
E5057	5057E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.65
E5059	5059E	0294	B	B09X09E	0.947	0.947	26.0	3	0	3	0	204.30	.093	149.57
E5060	5060E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.64
E5061	5061E	0294	B	B09X09E	0.947	0.947	26.0	13	0	0	0	670.80	.305	486.24
E5062	5062E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.65
E5063	5063E	0294	B	B09X09E	0.947	0.947	26.0	9	0	2	0	497.40	.226	361.54
E5065	5065E	0294	B	B09X09E	0.947	0.947	26.0	9	0	2	0	497.40	.226	361.54
E5066	5066E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.65
E5067	5067E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.63
E5068	5068E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.64
E5070	5070E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.65
E5071	5071E	0294	B	B09X09E	0.947	0.947	26.0	4	0	1	0	222.90	.101	162.07
E5072	5072E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.65
E5073	5073E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.64
E5304	5304E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.65
E5305	5305E	0294	B	B09X09E	0.947	0.947	26.0	12	0	0	0	619.20	.281	448.84
E5306	5306E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.63
E5307	5307E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.64
E5308	5308E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.65
E5309	5309E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.63
E5310	5310E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.64
E5312	5312E	0294	B	B09X09E	0.947	0.947	26.0	14	0	0	0	722.40	.328	523.64

* Weights are based on unirradiated factor weights

MAC Version 3.1

UNCLASSIFIED Document

REV 163 Updated: 3/15/94

6/27/94

Unpackaged Material Report

Page 1

Canister Ser Nu	FC Loc	Key Date	Subkey	FMT	MWD's	Fuel Assmb	Outers	Inners	Others	Pack Flag
0401E	E0401	9621		CE	0	0	0	0	21	
0401E	E0401	9621		KO	0	0	0	0	1	
0401E	E0401	9621		ON	0	0	0	0	2	
0601E	E0601	9621		CE	0	0	0	0	10	
0601E	E0601	9621		KO	0	0	0	0	2	
0601E	E0601	9621		ON	0	0	0	0	2	
2248E	E2248	2240	B	BE	0	2	0	0	0	
5262E	E5262	2240	C	BE	0	1	0	0	0	
5264E	E5264	2240	C	BE	0	1	0	0	0	
6959E	E6959	9621		KE	0	0	0	0	28	
6959E	E6959	9621		OE	0	0	0	0	3	
6960E	E6960	9621		KN	0	0	0	0	42	
6960E	E6960	9621		KW	0	0	0	0	1	
6960E	E6960	9621		ON	0	0	0	0	5	
6536	W2259	9621		K5	0	0	0	0	17	
7674	W2256	9621		K5	0	0	0	0	30	

6.0 APPENDIX B -- ATP Cross Reference

This section describes the relationship between the MAC user guide and the most recent Acceptance Tests run on the system.

The following sections of the ATP did not have an exact match with the MAC User Guide.

4.6.1.1	Daily Report Creation
4.6.1.3	Verify Daily Report
4.6.2	Other Reports
4.6.2.1	Report Menu Instructions
4.6.2.1.3	Basin Map
4.6.2.2	Report Test Procedure

The following sections within the User Guide did not have an exact match with an ATP test case. In several cases, the sections listed here reflect very detailed, low level instructions, which do turn out to be used in several ATP tests.

3.0	MAC MAIN MENU
3.1	Update Function
3.1.1.1	Select Canister to Encapsulate
3.1.6	Package (Package Material In a Canister)
3.1.6.1	Select Canister to Repackage Material In
3.1.7	Change (Change Material In a Canister)
3.10	Backup
3.11	GoParadox and Applications
3.12	ZDOS, Return, and Leave
3.2.5	Map Report
3.3	Print Functions
3.4.7	Display Factor Table
3.5	Xport Daily Files
3.6	Open a New MAC Revision
3.7	Close Current Revision
3.8	FileLoad
3.9	Executive

The table starting on the following page shows the matches between the User Guide and ATP Tests.

9/21/94

MAC ATP Step / User Guide Cross Reference

Page 1

	Section Number	Section Name
ATP: MACATP3	4.4	Help Functions
User Guide:	3.4	Help Functions
ATP: MACATP3	4.4.1	Help / All
User Guide:	3.4.3	Display All (Location, Canister, and Mat
ATP: MACATP3	4.4.2	Help / Daily
User Guide:	3.4.1	Display Daily Encapsulation Tables
ATP: MACATP3	4.4.3	Help / Location
User Guide:	3.4.4	Display Location Table
ATP: MACATP3	4.4.4	Help / Canister
User Guide:	3.4.5	Display Canister Table
ATP: MACATP3	4.4.5	Help / Material
User Guide:	3.4.6	Display Material Table
ATP: MACATP3	4.4.6	Help / History
User Guide:	3.4.2	Display History Tables
ATP: MACATP3	4.5	Update / Encapsulate
User Guide:	3.1.1	Encapsulate
ATP: MACATP3	4.5.1	Partially Stuck Canister
User Guide:	3.1.1.2.1	Partially Stuck Canister
ATP: MACATP3	4.5.2	Stuck Canister
User Guide:	3.1.1.2.2	All Stuck Canister
ATP: MACATP3	4.5.3	Normal Canister
User Guide:	3.1.1.2.3	Normal Canister
ATP: MACATP3	4.6	Reports
User Guide:	3.2	Report Functions

9/21/94

MAC ATP Step / User Guide Cross Reference

Page 2

	Section Number	Section Name
ATP: MACATP3	4.6.1	Daily Encapsulation Report
User Guide:	3.2.1	Daily Report
ATP: MACATP3	4.6.1.2	Print Daily Report
User Guide:	3.3.1	Print Daily Report
ATP: MACATP3	4.6.2.1.1	Storage & Bucket Summary
User Guide:	3.2.7	Storage Bucket Summary Report
ATP: MACATP3	4.6.2.1.2	Key File Summary
User Guide:	3.2.6	Key File Summary Report
ATP: MACATP3	4.6.2.1.4	History
User Guide:	3.2.4	History Report
ATP: MACATP3	4.6.2.1.5	Worksheets
User Guide:	3.2.3	Worksheets Report
ATP: MACATP3	4.6.2.1.6	Canister
User Guide:	3.2.8	Canister Package Report
ATP: MACATP3	4.6.2.1.7	Compact Basin Map
User Guide:	3.2.2	Compact Report
ATP: MACATP3	4.6.2.1.8	Unpackaged Report
User Guide:	3.2.10	Unpack Report
ATP: MACATP3	4.6.2.1.9	Empty Cubicle Report
User Guide:	3.2.9	Empty Report
ATP: MACATP3	4.6.2.2.1	Print Storage & Bucket Summary
User Guide:	3.3.7	Print StoBucSum Report
ATP: MACATP3	4.6.2.2.2	Print Key File Summary
User Guide:	3.3.6	Print Key File Summary Report

9/21/94

MAC ATP Step / User Guide Cross Reference

Page 3

	Section Number	Section Name
ATP: MACATP3	4.6.2.2.3	Print Basin Map
User Guide:	3.3.5	Print Map Report
ATP: MACATP3	4.6.2.2.4	Print History
User Guide:	3.3.4	Print History Report
ATP: MACATP3	4.6.2.2.5	Print Worksheets
User Guide:	3.3.3	Print Worksheets Report
ATP: MACATP3	4.6.2.2.6	Print Canister
User Guide:	3.3.8	Print Package Report
ATP: MACATP3	4.6.2.2.7	Print Compact Basin Map
User Guide:	3.3.2	Print Compact Report
ATP: MACATP3	4.6.2.2.8	Print Unpackaged Report
User Guide:	3.3.10	Print Unpack Report
ATP: MACATP3	4.6.2.2.9	Print Empty Cubicle Report
User Guide:	3.3.9	Print Empty Report
ATP: MCLEAN	4.4.1	UPDATE Menu Password.
User Guide:	3.1	Update Function
ATP: MCLEAN	4.4.5	Report & Print -- Empty/Unpackage
User Guide:	3.2.9	Empty Report