<table>
<thead>
<tr>
<th>Name</th>
<th>MSIN</th>
<th>With Attachment</th>
<th>EDT/ECN &amp; Comment</th>
<th>EDT/ECN Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. J. Dilberto</td>
<td>H6-10</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>D. A. Guettler</td>
<td>B1-18</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>L. L. Lang</td>
<td>E6-21</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>P. M. Olson</td>
<td>S6-71</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>J. D. Williams</td>
<td>H6-28</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Central Files (2)</td>
<td>L8-04</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>LEMIS Library (2)</td>
<td>B1-18</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>OSTI (2)</td>
<td>L8-07</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
DISCLAIMER

Portions of this document may be illegible in electronic image products. Images are produced from the best available original document.
<table>
<thead>
<tr>
<th>Item No.</th>
<th>Document/Drawing No.</th>
<th>Sheet No.</th>
<th>Rev. No.</th>
<th>Title or Description of Date Transmitted</th>
<th>Approval Designator</th>
<th>Reason for Transmittal</th>
<th>Disposition</th>
<th>Originator Remarks</th>
<th>Receiver Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>WHC-SD-WM-TP-169</td>
<td>0</td>
<td></td>
<td>Liquid Effluent Monitoring Information System Test Plans Releases 2.0 and 3.0</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

**DATA TRANSMITTED**

- **Item No.:** 1
- **Document/Drawing No.:** WHC-SD-WM-TP-169
- **Sheet No.:** 0
- **Rev. No.:**
- **Title or Description of Date Transmitted:** Liquid Effluent Monitoring Information System Test Plans Releases 2.0 and 3.0

**KEY**

- **Approval Designator (F):**
  - 1. Approval
  - 2. Release
  - 3. Information
  - 4. Dist. (Receipt Acknow. Required)

- **Reason for Transmittal (G):**
  - 1. Approved
  - 2. Approved w/comment
  - 3. Disapproved w/comment

- **Disposition (H) & (I):**
  - 1. Approved
  - 2. Review
  - 3. Post-Review

- **E, S, O, D or N/A (see WHC-CM-3, Sec.12.7):**
  - 1. Release
  - 2. Information

- **Reason:***
  - QA
  - Safety
  - Env.

**DATATRANSMITTED**

<table>
<thead>
<tr>
<th>(A) Item No.</th>
<th>(B) Document/Drawing No.</th>
<th>(C) Sheet No.</th>
<th>(D) Rev. No.</th>
<th>(E) Title or Description of Date Transmitted</th>
<th>(F) Approval Designator</th>
<th>(G) Reason for Transmittal</th>
<th>(H) Disposition</th>
<th>(I) Originator Remarks</th>
<th>(J) Receiver Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>WHC-SD-WM-TP-169</td>
<td>0</td>
<td></td>
<td>Liquid Effluent Monitoring Information System Test Plans Releases 2.0 and 3.0</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

**KEY**

- **Approval Designator (F):**
  - 1. Approval
  - 2. Release
  - 3. Information
  - 4. Dist. (Receipt Acknow. Required)

- **Reason for Transmittal (G):**
  - 1. Approved
  - 2. Review
  - 3. Post-Review

- **Disposition (H) & (I):**
  - 1. Approved
  - 2. Review
  - 3. Post-Review

- **E, S, O, D or N/A (see WHC-CM-3, Sec.12.7):**
  - 1. Release
  - 2. Information

- **Reason:***
  - QA
  - Safety
  - Env.
<table>
<thead>
<tr>
<th><strong>RELEASE AUTHORIZATION</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Document Number:</strong></td>
</tr>
<tr>
<td><strong>Document Title:</strong></td>
</tr>
<tr>
<td><strong>Release Date:</strong></td>
</tr>
</tbody>
</table>

This document was reviewed following the procedures described in WHC-CM-3-4 and is:

**APPROVED FOR PUBLIC RELEASE**

**V.L. Birkland**

May 25, 1995

**TRADEMARK DISCLAIMER.** Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof or its contractors or subcontractors.

This report has been reproduced from the best available copy. Available in paper copy and microfiche. Printed in the United States of America. Available to the U.S. Department of Energy and its contractors from:

U.S. Department of Energy
Office of Scientific and Technical Information (OSTI)
P.O. Box 62
Oak Ridge, TN 37831
Telephone: (615) 576-8401

Available to the public from:

U.S. Department of Commerce
National Technical Information Service (NTIS)
5285 Port Royal Road
Springfield, VA 22161
Telephone: (703) 487-4650

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED.
The Liquid Effluent Monitoring Information System (LEMIS) is being developed as the organized information repository facility in support of the liquid effluent monitoring requirements of the Tri-Party Agreement. It is necessary to provide an automated repository into which the results from liquid effluent sampling will be placed. This repository must provide for effective retention, review, and retrieval of selected sample data by authorized persons and organizations.

This System Architecture document is the aggregation of the DMR P+ methodology project management deliverables. Together they represent a description of the project and its plan through four Releases, corresponding to the definition and prioritization of requirements defined by the user.
### CONTENTS

**1.0 LEMIS**

- 1.1 LE2110U2 PROJECT DEFINITION ........................................ 1
- 1.2 LE2110U5 SAP DEFINITION .............................................. 33
- 1.3 LE2120U1 SAMPLE AUTHORIZATION FORM .................................. 101
- 1.4 LE2123U1 SAF RELEASE .................................................. 196
- 1.5 LE2124U1 SCHEDULE SAMPLE ............................................. 203
- 1.6 LE3310U1 FIELD DATA DEFINITION ...................................... 216
- 1.7 LE4100U1 ENTER CONSTITUENT RESULTS .................................. 253
- 1.8 LE4110U1 CORRECT AND VALIDATE RESULTS .............................. 287
- 1.9 LE4120U1 ENTER/REPLACE METHOD ....................................... 314
- 1.10 LE4220U1 START DATALOAD ............................................ 324
- 1.11 LE4251U1 ENTER MISSING METHODS FOR ORGANIC .......................... 330
- 1.12 LE4252U1 ENTER MISSING METHODS FOR INORGANIC ...................... 345
- 1.13 LE4310U1 VERIFY RESULTS ............................................. 359
- 1.14 LE4311U1 ENTER VERIFICATION DATA .................................... 382
- 1.15 LE5110U1 UPDATE DATA VALUE CODE .................................... 403
- 1.16 LE5120U1 VIEW SAF CONSTITUENT RESULTS ............................. 413
- 1.17 LE5130U1 SAMPLE QUERY .............................................. 432
- 1.18 LE5140U1 VIEW SAF STATUS ............................................ 437

**2.0 GENERIC**

- 2.1 GE2220U1 MAINTAIN LEVEL DATA VALID FOR ROLES ....................... 443
- 2.2 GE3410U1 MAINTAIN JUNCTION LIST ...................................... 457
- 2.3 GE3510U1 MAINTAIN BULLETINS .......................................... 498
- 2.4 GE3710U1 MAINTAIN TRANSFER SETUP .................................... 513
- 2.5 GE3721Q1 START FILE TRANSFER ......................................... 546
- 2.6 GE3810U1 MAINTAIN MESSAGES .......................................... 554

### DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.
This page intentionally left blank.
1.0 LEMIS

1.1 LE2110U2 PROJECT DEFINITION

LEMIS Module Test Checklist Report

Name: PROJECT DEFINITION
Short Name: LE2110U2
Purpose: Maintain Project Information.

Initial Test Date: 4/3/93 DC  4/28 DC
Verification Date: 4/19/93 DC

Module Description

This module is used to define a Project, including:
   1) Project definition
   2) Project status maintenance

A project is associated, not subordinate, to a TPA submilestone. A project may be associated with multiple submilestones and a many-many relationship exists.

Text may be associated with a project.

A project will be linked to the SITE level location with a relationship of REL. This will default and will not be displayed on the screen.

A project is associated with organizations and people:
   1. Organizations. Use LOV link to organization list. Multiple organizations may be associated with specific relationship codes.
   2. Persons. Use literal values. Multiple persons can be associated with specific relationship codes.

A project is NOT associated with methods and procedures.
Module Description
------------------
The project status will default to CR (create) for the first entry. The default date will be the current date; this is expected to be changed by the operator. Text is associated with the project status. Multiple status lines are possible, display at least two.

Module Help
------------
This screen supports the update and retrieval functions for the projects upon which the liquid effluent sampling activities are based. This screen is used to define the projects and requirements upon which the project depends. The status of a project may also be updated from this screen.

To store a new project:

1. Enter the project identifier. This identifier may be up to 20 characters in length. The identifier must be unique or an error will occur. The field is required.
2. TAB and enter the title of the project. The title may be from one to 40 characters in length and is required.
3. TAB to the REV field. This is the revision identifier of the project. The field is required. A default value of zero is displayed. To accept the default, press the ENTER key. To enter a different revision level, key the revision number over the default and press ENTER. (A number is required.)

The Text? flag indicates whether free-form text is associated with the requirement. If the flag is set to 'N', no text is present. To add text, press the TEXT key (F7). A popup screen will appear that will permit you to enter as much text as desired. Several different types of text may be available. Once the text has been stored, the text flag will be set to 'Y'. Additional text processing assistance can be obtained by pressing CTRL/K while the text popup window is being displayed.

4. Each project MUST be assigned to a requirement. For example, a project is assigned to a TPA submilestone. To associate a project with its responsible requirement:

   a. Press the PAGE DOWN key to move the cursor to the REQ ID field of the Responsible Requirement block.
   b. Enter the identifier of the requirement, if known. If not known, press LOV (F9) to display a list of available requirements:

      1) Press the down arrow key until the cursor points to the desired requirement.
      2) Press the ENTER key to select the requirement. The requirement and its information will be displayed on the screen.
Module Help

5. Press the COMMIT key (F10) to store the data in the database.

To update an existing project:

1. Press the ENTER QY key (F12).
2. Enter the identifier of the project to be updated. If you only
   know part of the identifier, enter that part followed by a
   percent sign (%). This will cause those projects that begin
   with the partial identifier to be queried.
3. Press the RUN QY key (Shift/F12). The project will be
   displayed on the screen; if more than one project was queried,
   the first one matching the query will be displayed. To locate
   the desired project:
   a. Press the down arrow key until the desired project is
      displayed.
   b. Press the TAB key until the cursor is at the field to be
      modified.
4. Enter the new data in the field and press ENTER.
5. If more than one field is to be updated, repeat the above
   process for each field.
6. Press the COMMIT key (F10) to store the changes in the database.
7. If the text associated with the project is to be modified:
   a. Press the TEXT key (F7). The default description text will be
      displayed. If you wish to modify another text type:
      b. Press LOV (F9) to display the other text options.
      c. Press ENTER to select the desired text type. The text for
         that text type will be displayed.
   2. Press the PAGE DOWN key to move the cursor to the text block.
   3. Use the up and down arrow keys to move the cursor to the line to
      be modified. Change the text as required. If special editing
      of text is necessary, use the KEY HELP (Shift/F1) to display
      the editing keys available.
   4. Press the COMMIT key (F10) to update the database.

Projects may not be deleted if subordinate QAPPs are present. To
delete a project that has no subordinate QAPPs:

1. Press the ENTER QY key (F12).
2. Enter the identifier of the project to be deleted.
3. Press the RUN QY key (Shift/F12). The project will be
   displayed on the screen.
4. Press the DELETE grey key. The screen should clear.
5. Press the COMMIT key (F10) to update the database.
Module Help
-----------

Each project must be assigned to a requirement. For example, a project is assigned to a TPA submilestone.

To change the association between a project and a requirement:

1. Press the PAGE DOWN key to move the cursor to the REQ ID field of the Responsible Requirement block.
2. Press the LOV (F9) key to display other requirements that may replace the existing requirement:
   a. Press the down arrow key until the cursor points to the desired requirement.
   b. Press the ENTER key to select the requirement. The requirement and its information will be displayed on the screen.
3. Press the COMMIT key (F10) to complete the update of the database.

The status of each project is tracked in the Project Status block. Here you may identify the different types of status conditions and the dates on which the condition occurs. Unlimited text may be added to clarify the status condition. To add a new status condition:

1. Press the PAGE DOWN key to move the cursor to the first status line.
2. Press the down arrow key, if required, to move the cursor to the first blank line or press the INSERT key.
3. Press LOV to display the available valid status condition codes.
4. Use the up and down arrow keys to select the desired status condition.
5. Press the COMMIT (F10) key to move the status to the screen.
6. To add more statuses, press the down arrow key to the next blank space and repeat the selection process.
7. Press the COMMIT (F10) key to store the selected status conditions in the database as associated with the project.

To store text expanding the description of a status condition:

1. Use the up and down arrow keys to move the cursor to the status condition line where text is to be stored.
2. Press the TEXT key (F7). The text popup window will be displayed with cursor at the text type code. If a text type other than that displayed is desired:
   a. Press LOV (F9) to display the other text options.
   b. Use the down arrow key to move the cursor to the desired text type.
   c. Press ENTER to select the desired text type. The text for
Module Help

---

3. Press the PAGE DOWN key to move the cursor to the text block.
4. If no text is present, enter the desired text. If text is present:
   a. Use the up and down arrow keys to move the cursor to the line to be modified. Change the text as required. If special editing of text is necessary, use the KEY HELP (Shift/F1) to display the editing keys available.
   b. To add new text at the end, press the down arrow key until a blank line appears. Enter the text.
5. Press the COMMIT key (F10) to store the text in the database.
6. Press the ENTER key until the popup window disappears and the requirement screen reappears.
7. If more text is to be added to other status condition entries, use the up and down arrow keys to move the cursor to the desired entry and repeat the above steps.

---

UNIT TEST CHECKLIST

<table>
<thead>
<tr>
<th>Function Key</th>
<th>Key Help</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show Version</td>
<td>Shift-F10</td>
</tr>
<tr>
<td>Comment/Bug</td>
<td>Shift-F3</td>
</tr>
<tr>
<td>Fast Access</td>
<td>F5</td>
</tr>
<tr>
<td>Back</td>
<td>F4 or Esc</td>
</tr>
<tr>
<td>Main Menu</td>
<td>Shift-F4</td>
</tr>
<tr>
<td>Key Template</td>
<td>Ctrl-F1</td>
</tr>
<tr>
<td>Context Print</td>
<td>F11</td>
</tr>
<tr>
<td>Query Print</td>
<td>Ctrl-F11</td>
</tr>
<tr>
<td>Oracle Print</td>
<td>Shift-F11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Block Title: Project</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Block Table: EVENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help</td>
</tr>
<tr>
<td>Online Doc</td>
</tr>
<tr>
<td>Related Data</td>
</tr>
<tr>
<td>Spec Func 1</td>
</tr>
<tr>
<td>Home/End</td>
</tr>
<tr>
<td>Scroll Up/Dn</td>
</tr>
<tr>
<td>Prv/Nxt Rec</td>
</tr>
<tr>
<td>Clear Field</td>
</tr>
<tr>
<td>Clear Form</td>
</tr>
<tr>
<td>Enter Query</td>
</tr>
<tr>
<td>Correct Query Fields?</td>
</tr>
<tr>
<td>Correct Query Order?</td>
</tr>
</tbody>
</table>

---

5
### Block Title: Project
\[\text{Block Table: EVENT}\]
- Insert Rec: Insert
- Mandatory checks OK?: Validation checks OK? : Add record at end
- List of Values OK?: Duplicate Fld: Shift-F6
- Duplicate Rec: F6
- Optional fields marked?: Correct fields uppercase:

### Block Title: Responsible Requirement
\[\text{Block Table: EVENT_NEST}\]
- Home/End: Home/End
- Scroll Up/Dn: Shift-Up/Dn
- Prv/Nxt Rec: Up/Down
- Spec Func 1: Shift-F5
- Spec Func 2: Ctrl-F5

- Help: F1
- Online Doc: F2
- Related Data: F3
- Clear Field: F8
- Clear Form: Shift-F8

- Key Help: Shift-F1
- Dis Journal: Shift-F2
- Edit Text: F7
- Spec Func 2: Ctrl-F5

- Home/End: Home/End
- Prv/Nxt Block: PgDn/PgUp
- Prv/Nxt Field: Tab/Sh-Tb
- Prv/Nxt Rec: Up/Down
- Commit Form: F10

- Enter Query: F12
- Correct Query Fields?: Uppercase and LOVs?
- Execute Qry: Shift-F12
- Correct Query Order?

- Insert Rec: Insert
- Mandatory checks OK?: Validation checks OK?
- List of Values OK?: Duplicate Fld: Shift-F6
- Duplicate Rec: F6
- Optional fields marked?: Correct fields uppercase:

- Add record at end
- List of Values OK?
- Duplicate Fld: Shift-F6
- Correct fields uppercase:

### Delete Record: Delete
Testing of the transaction is performed at four levels:

1. Developer testing.
2. Secondary testing.
3. End user testing.
4. Production release & verification.

As each applicable section of this test plan is completed, the designated individual responsible for the section will sign the plan in the appropriate places. Each check off item will be completed. The status of the transaction will be updated in the data dictionary as the transaction progresses through the development and test steps.

Developer Testing

As each individual transaction is generated, the developer performs tests against the transaction to insure that it meets specifications and works properly. Upon successful completion of this testing, the transaction is made available for secondary testing.

Test status conditions are:
WHC-SD-WM-TP-I69 REV 0

Transaction under development, untested.
Transaction moved to development directory (addmod).
Development complete, initial unit testing in progress.
Help added
Unit Test checklist completed.
Specific test plan added (if needed).
Any bugs found in Unit test fixed.
Updated test bookét printed.
Initial unit testing complete.

Developer Date Complete 4/15/93

Secondary Testing

Secondary testing is performed by a person external to the
development team. Tests are performed using a standardized test
checklist. Initial testing is performed to ensure that the
transaction meets the functional requirements of the transaction and
satisfies the test plan narrative that follows.

4 - Secondary testing in progress.
5 - Secondary testing complete, problems found. Resolution
in progress.
6 - Unable to resolve problem at this time.
7 - Problem resolution complete.
8 - Secondary testing complete, no problems found.

Tester Date Complete 4/19/93

When problems are found:

1. The tester passes the checklist to the project manager for
review and action.
2. The project manager assigns the checklist to the developer of
the transaction for correction of the problems.
3. The developer corrects the described problems, records the
corrective actions taken and the number of hours of
corrective effort used, tests the transaction for correct
operation, and returns the checklist to the project manager.
4. The project manager returns the checklist to the tester for
retesting.

The above sequence of events repeats until the tester signs off
the transaction as passing the test requirements.

End User Testing

The transaction is tested by end users for a predetermined time
period. This testing is done in the development environment. If no
problems are encountered, or all problems are resolved at the end of
this time period, the module is ready for Project Manager review.
( ) 9 - End User testing in progress.
( ) 10 - Problem found, resolution in progress.
( ) 11 - Problem resolution complete.

Developer __________________ Date Complete ______

( ) 12 - Resolution verified.

Tester __________________ Date Complete ______

Production Status

( ) 13 - Ready for Project Manager/System Architect review.

The Project Manager or System Architect reviews all test results and determines that the transaction has completed testing.

Architect/Manager __________ Date Complete ______

( ) 14 - The transaction is ready to be placed into production.

Software files moved to production directory.

Transaction added to production menu.

Transaction access given to production roles.

Validation test performed in production.

Production documentation up to date.

( ) 15 - The transaction has been put into production

By __________ Date Done ______

Module Test Plan

Display transaction help. Verify that the narrative adequately describes the purpose and functions of the transaction in end-user terms.

Transaction help describes:

- Purpose of the transaction
- Functions performed by the transaction
- Where multiple block, what happens in each block.

Block Title: Project
Block Table: EVENT
Block Usage: Full Function

Block Help

This tables stores data relating to an event, including the event identifier, title, event type, validation level and related text flag. An event is defined as a TPA Requirement, Project, QAPP, Task, SAP, or SAF.
Block Help

(✓) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

(✓) Block help describes:

(✓) Purpose of the block
(✓) Options available in the block
(✓) The relationship of the block to the transaction or to the principal parent block of the transaction
(✓) Navigation to other blocks of the transaction

(✓) Where block synchronization is used, ensure that the block data is in sync with the parent block.

(✓) Query a single record:

(✓) A single record is retrieved.
(✓) Pressing the F12 key clears the record and permits entering a second query.
(✓) The second query successfully retrieves the desired data.

(✓) Query multiple records using wild cards:

(✓) Pressing F12 clears the block and makes the block ready for a query.
A query composed of a trailing % wildcard retrieves the desired data.
A query using a prefix % wildcard retrieves the correct data.
A query using both prefix and suffix % wildcards retrieves the correct data.
A query using the underscore (_) position wildcard retrieves the correct data.

Verify that the data queries in the block are ordered logically.

Store a series of records using the F6 [duplicate record] key to carry forward field values from the previously stored record.

Attempting to store the duplicated record without change should result in an error.
Change key fields and store the record. It should store successfully.

Update a record:
The change count should increment.
The date updated should become the current date.
An error should occur if the operator owner identifier does not match the data owner identifier.

Delete a record from the block:
If the record has dependent records, the delete should fail unless the help text indicates that a cascading delete is permitted.
Use the clear rcd key (CTRL/F8).
For a single record block, the block should clear.
For a multi-record block, the record pointed to by the cursor should clear.
Use the delete key.
For a single record block, the block should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should appear in the block.
For a multiple record block, the entry should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should move up to fill the cleared space.

Field Prompt: Proj ID
Field Usage: Updateable
Field Name: IDENT_EVENT

Field Help
This field uniquely identifies the event (Requirement, Project, QAPP, SAP, or SAF) to the database.
An error will occur if you attempt to enter a
Field Help

identification value already present in the database.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

(4) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

(4) Enter data beyond the length of the field:
   (4) If autoskip is in effect, cursor will skip to the next field.
   (4) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

(4) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

(4) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
   (4) Change the field, committing after each change.
   (4) Change the field where a range of valid values exists:
      (4) Value below valid range should display message COM00101 or COM00103 (if no LOV).
      (4) Value above valid range should display message COM00101 or COM00103 (if no LOV).
      (4) Minimum value within the range should be accepted.
      (4) Maximum value within the range should be accepted.
      (4) Random value within the range should be accepted.

(4) Enter query mode and verify that this field is accessible.

(4) Enter query mode and enter a valid value in this field.
   (4) Only records matching the entered value should be displayed.

(4) Attempt to delete an existing data field value. An error should result when <F10> or <Enter> are pressed.
   (4) Use the space bar to attempt to delete the field data.
   (4) Use clear field (F8) to attempt to delete the field data.

(4) Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.
Enter a duplicate value. An error should occur.

From LOV, select a value already present in the database. An error should occur.
Field Prompt:  Title  
Field Usage: Updateable  
Field Name:  TITLE_EVENT

Field Help

Enter a 1-40 character descriptive title for the event.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
   ( ) Change the field, committing after each change.
   ( ) Change the field where a range of valid values exists:
      ( ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
      ( ) Value above valid range should display message COM00101 or COM00103 (if no LOV).
      ( ) Minimum value within the range should be accepted.
      ( ) Maximum value within the range should be accepted.
      ( ) Random value within the range should be accepted.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Attempt to delete an existing data field value. An error should result when <F10> or <Enter> are pressed.
   ( ) Use the space bar to attempt to delete the field data.
   ( ) Use clear field (F8) to attempt to delete the field data.
Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.
Field Prompt: Rev
Field Usage: Updateable
Field Name: REV_EVENT

Field Help

The field contains the code of the latest revision of the event. The code may a numeric value from 0 through 999.

Field Test Plan

( ) Attempt to store alphabetic characters in the field. An error should result.

( ) Begin the field entry with a space. An error should result.

( ) Attempt to enter a longer data value than allowed.

( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.

( ) Change the field, committing after each change.

( ) Change the field where a range of valid values exists:  

  ( ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
  ( ) Value above valid range should display message COM00101 or COM00103 (if no LOV).
  ( ) Minimum value within the range should be accepted.
  ( ) Maximum value within the range should be accepted.
  ( ) Random value within the range should be accepted.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.  

( ) Only records matching the entered value should be displayed.

( ) Attempt to enter a decimal value. An error should occur.

( ) Accept the default.

( ) Modify each default value with a valid alternative.

( ) Modify each default value with an invalid alternative.

( ) Attempt to delete an existing data field value. An error should result when <F10> or <Enter> are pressed.
Use the space bar to attempt to delete the field data.

Use clear field (F8) to attempt to delete the field data.

Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.

Test LOV:

( ) Select the first entry in the LOV.

( ) Select the last entry in the LOV.

( ) Use the FIND option and select an entry.
Field Help

Field Test Plan

1. Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

2. Enter data beyond the length of the field:
   - If autoskip is in effect, cursor will skip to the next field.
   - If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

3. Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

4. Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
   - Change the field, committing after each change.

5. Change the field where a range of valid values exists:
   - Value below valid range should display message COM00101 or COM00103 (if no LOV).
   - Value above valid range should display message COM00101 or COM00103 (if no LOV).
   - Minimum value within the range should be accepted.
   - Maximum value within the range should be accepted.
   - Random value within the range should be accepted.

6. Enter query mode and verify that this field is accessible.

7. Enter query mode and enter a valid value in this field.
   - Only records matching the entered value should be displayed.

8. Skip the field using the TAB key.

9. Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

10. Delete an existing value. The field should be cleared and stored:
    - Delete the value using the space bar.
    - Delete the value using the clear field key (F8).
Field Help

This field is a flag that identifies the presence of additional textual information about the data item. If "N" is displayed, no text is currently present. If "Y" is displayed, text of one or more types is present. To enter or display text, press F7. A popup screen will display the default text type for the data item. If this default text type is the one you want, you may either read or add text. If you want to use another available text type for the data item, press LOV (F9) to display and select the desired text type. Once you have entered any text into the database, the indicator flag for the data item will be set to "Y"

This data field:
- Provides a default value. To accept the default value, press the ENTER key or TAB key.
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

1. Enter query mode and verify that this field is accessible.
2. Enter query mode and enter a valid value in this field.
   (Only records matching the entered value should be displayed.

3. Press the LOV (F9). The text popup should be displayed.
4. With the cursor at the text type, press LOV (F9). Where available, a list of other text types available for the entry will be displayed. Select one text type for testing.
5. Press the ENTER key to move the cursor to the text block.
6. Enter two lines of text. The cursor should automatically move to the next line when one line is full.
7. Press the COMMIT key (F10). Press ENTER in response to prompt.
until the popup disappears and the primary screen reappears.

( ) The text flag should be set to 'Y'.

( ) Select and update text that already exists.
Block Title: Responsible Requirement  
Block Table: EVENT NEST  
Block Usage: Undefined

Block Help

This table permits the linking of one sampling event to another. In this way, a hierarchy of events may be defined. For example, one event may be defined that is a TPA requirement. From that event, a QAPjP is defined as a subordinate event. The QAPjP has one or more SAPs that make up another subordinate level of events. From each of the SAPs, individual actual sampling events may be defined. This hierarchy permits extending reports so that the same report may produce output for any of the levels described above. This reduces the cost of reporting and can associate multiple related events within the same report.

Block Test Plan

Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

- Purpose of the block
- Options available in the block
- The relationship of the block to the transaction or to the principal parent block of the transaction
- Navigation to other blocks of the transaction

Where block synchronization is used, ensure that the block data is in sync with the parent block.

Query a single record:

- A single record is retrieved.
- Pressing the F12 key clears the record and permits entering a second query.
- The second query successfully retrieves the desired data.

Query multiple records using wild cards:

- Pressing F12 clears the block and makes the block ready for a query.
- A query composed of a trailing % wildcard retrieves the desired data.
- A query using a prefix % wildcard retrieves the correct data.
- A query using both prefix and suffix % wildcards retrieves the correct data.
A query using the underscore (_) position wildcard retrieves the correct data.

Verifying that the data queries in the block are ordered logically.

Store a series of records using the F6 [duplicate record] key to carry forward field values from the previously stored record.

Attempting to store the duplicated record without change should result in an error.

Change key fields and store the record. It should store successfully.

Field Prompt: **Title**
Field Usage: Queryable Only
Field Name: **TITLE_EVENT**

Field Help

<table>
<thead>
<tr>
<th>Enter a 1-40 character descriptive title for the event.</th>
</tr>
</thead>
</table>

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

1. Enter query mode and verify that this field is accessible.
2. Enter query mode and enter a valid value in this field. Only records matching the entered value should be displayed.
3. Enter a duplicate value. An error should occur.
4. From LOV, select a value already present in the database. An error should occur.
Field Help

This field uniquely identifies the event (Requirement, Project, QAPP, SAP, or SAF) to the database. An error will occur if you attempt to enter a identification value already present in the database.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

(a) Enter query mode and verify that this field is accessible.
(b) Enter query mode and enter a valid value in this field. Only records matching the entered value should be displayed.
(c) Enter a duplicate value. An error should occur.
(d) From LOV, select a value already present in the database. An error should occur.
Field Prompt: Rev
Field Usage: Queryable Only
Field Name: REV_EVENT

Field Help
The field contains the code of the latest revision of the event. The code may be a numeric value from 0 through 999.

Field Test Plan

Enter query mode and verify that this field is accessible.

Enter query mode and enter a valid value in this field.

Only records matching the entered value should be displayed.

Attempt to enter a decimal value. An error should occur.

Accept the default.

Modify each default value with a valid alternative.

Modify each default value with an invalid alternative.

Test LOV:

Select the first entry in the LOV.

Select the last entry in the LOV.

Use the FIND option and select an entry.

Enter a duplicate value. An error should occur.

From LOV, select a value already present in the database. An error should occur.
Block Title: Project Status
Block Table: LEMIS STATUS
Block Usage: Full Function

This table stores data relating to the status of the events. As the status of the event changes, this table is updated and stores past, current, and future status dates that have been entered for a specific event.

Block Test Plan

- Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:
  - Purpose of the block
  - Options available in the block
  - The relationship of the block to the transaction or to the principal parent block of the transaction
  - Navigation to other blocks of the transaction

- Where block synchronization is used, ensure that the block data is in sync with the parent block.

- Query a single record:
  - A single record is retrieved.
  - Pressing the F12 key clears the record and permits entering a second query.
  - The second query successfully retrieves the desired data.

- Query multiple records using wild cards:
  - A query composed of a trailing % wildcard retrieves the desired data.
  - A query using a prefix % wildcard retrieves the correct data.
  - A query using both prefix and suffix % wildcards retrieves the correct data.
  - A query using the underscore (_) position wildcard retrieves the correct data.

- Verify that the data queries in the block are ordered logically.

- Store a series of records using the F6 [duplicate record] key to
carry forward field values from the previously stored record.

- Attempting to store the duplicated record without change should result in an error.
- Change key fields and store the record. It should store successfully.

Update a record:
- The change count should increment.
- The date updated should become the current date.
- An error should occur if the operator owner identifier does not match the data owner identifier.

Delete a record from the block:
- If the record has dependent records, the delete should fail unless the help text indicates that a cascading delete is permitted.
- Use the clear rcd key (CTRL/F8).
- For a single record block, the block should clear.
- For a multi-record block, the record pointed to by the cursor should clear.
- Use the delete key.
- For a single record block, the block should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should appear in the block.
- For a multiple record block, the entry should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should move up to fill the cleared space.

Field Prompt: Status
Field Usage: Non Updateable
Field Name: TYPE_STATUS

Field Help

Enter the 4-character code that identifies the nature of the date information entered.
As a general convention, the first character of the field should contain, when appropriate:

S - SCHEDULED
A - ACTUAL
R - RESCHEDULED

The second and third characters should contain:

SA - SAMPLE
TR - TRANSPORT
LA - LAB
RE - RESULT
Field Help

VA - VALIDATION
VE - VERIFICATION

The forth character should contain:
B - BEGIN
E - END

Examples: SSAB = SCHEDULED SAMPLE BEGIN
          ALAE = ACTUAL LAB END

This data field:
- Provides a default value. To accept the default value, press the
  ENTER key or TAB key.
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

( ) Verify that the field accepts character or numeric data within
the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and
overlay characters, leaving the last character keyed in the
last position of the field.

( ) Display column help. Verify that the narrative adequately
describes the column's purpose and functions in end-user terms.

( ) Attempt to change data in the field. An error should result.
   ( ) Use the spacebar to attempt to change data.
   ( ) Use the clear field key (F8) to attempt to change data.

( ) Attempt to delete data in the field. An error should result.
   ( ) Use the spacebar to attempt to delete data.
   ( ) Use the clear field key (F8) to attempt to delete data.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Accept the default.
Modify each default value with a valid alternative.

Modify each default value with an invalid alternative.

Attempt to delete an existing data field value. An error should result when <F10> or <Enter> are pressed.

Use the space bar to attempt to delete the field data.

Use clear field (F8) to attempt to delete the field data.

Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.

Test LOV:
   - Select the first entry in the LOV.
   - Select the last entry in the LOV.
   - Use the FIND option and select an entry.

Enter a duplicate value. An error should occur.

From LOV, select a value already present in the database. An error should occur.

Field Prompt: Description
Field Usage: Queryable Only
Field Name: DESCRIPTION

Enter a 1-30 character description of the LEMIS status code.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

Enter query mode and verify that this field is accessible.

Enter query mode and enter a valid value in this field.
(Only records matching the entered value should be displayed.

Enter a duplicate value. An error should occur.

From LOV, select a value already present in the database. An error should occur.
Field Prompt: Date  
Field Usage: Updateable  
Field Name: DATE_STATUS

Field Help

- Enter the date for the event status selected.

This data field:
- Provides a default value. To accept the default value, press the ENTER key or TAB key.
- Must contain a valid value. A blank is not allowed.
- Date data must be entered in the format mm/dd/yy
   where:
   
   mm  =  the month of the year; months prior to 10 should have a leading zero, e.g., May should be 05
   dd  =  the day of the month; days prior to 10 should have a leading zero, e.g., May 1 should be shown as 01
   yy  =  the last two digits of the calendar year, e.g., 1992 is entered as 92.
- Contents are automatically generated by the system.

Field Test Plan

( ) Verify that the field only allows valid dates.

( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
   ( ) Change the field, committing after each change.
   ( ) Change the field where a range of valid values exists:
      ( ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
      ( ) Value above valid range should display message COM00101 or COM00103 (if no LOV).
      ( ) Minimum value within the range should be accepted.
      ( ) Maximum value within the range should be accepted.
      ( ) Random value within the range should be accepted.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Accept the default.

( ) Modify each default value with a valid alternative.
(1) Modify each default value with an invalid alternative.

(2) Attempt to delete an existing data field value. An error should result when <F10> or <Enter> are pressed.

(3) Use the space bar to attempt to delete the field data.

(4) Use clear field (F8) to attempt to delete the field data.

(5) Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.
Field Help

This field is a flag that identifies the presence of additional textual information about the data item. If "N" is displayed, no text is currently present. If "Y" is displayed, text of one or more types is present. To enter or display text, press F7. A popup screen will display the default text type for the data item. If this default text type is the one you want, you may either read or add text. If you want to use another available text type for the data item, press LOV (F9) to display and select the desired text type. Once you have entered any text into the database, the indicator flag for the data item will be set to "Y".

This data field:
- Provides a default value. To accept the default value, press the ENTER key or TAB key.
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Test LOV:
   ( ) Select the first entry in the LOV.
   ( ) Select the last entry in the LOV.
   ( ) Use the FIND option and select an entry.

( ) Press the TEXT key (F7). The text popup should be displayed.

( ) With the cursor at the text type, press LOV (F9). Where available, a list of other text types available for the entry will be displayed. Select one text type for testing.

( ) Press the ENTER key to move the cursor to the text block.

( ) Enter two lines of text. The cursor should automatically move to the next line when one line is full.

( ) Press the COMMIT key (F10). Press ENTER in response to prompt
until the popup disappears and the primary screen reappears.

( ) The text flag should be set to 'Y'.

( ) Select and update text that already exists.
LEMIS Module Test Checklist Report

Name: SAP DEFINITION
Short Name: LE2110U5
Purpose: Maintain SAP Information.

Initial Test Date: 03/13/93
Verification Date: 06/18/93

Module Description

This module is used to define a SAP, including:
1) SAP definition
2) SAP status maintenance
3) Person data
4) SAP Location linkage
5) Analytical Methods linkage

The SAP is subordinate to and cannot exist without a parent QAPP.

The SAP identifies the specific, within close approximity, the actual sampling locations on the target stream that will be sampled. S&ML will use text the further refine the physical sampling position if it differs any from the defined location.

Text may be associated with the SAP.

Locations will be identified by their description. Display of the unique identifier and WIDS ID, if any, is suppressed.

The SAP method list is extracted from the QAPP shopping list. In this case, the specific methods to be employed on this stream are pulled from the QAPP list. Should the testing to be performed on the samples from a location change in the future, the SAP itself will be updated.
Module Description

The SAP cannot contain a method that is not also identified in the QAPP, even an alternate.

People and organizations are associated with the SAP:

1. Organizations. Use LOV link to organization list. Multiple organizations may be associated with specific relationship codes.

2. Persons. Use literal values. Multiple persons can be associated with specific relationship codes.

SAP status information will default to CR (create), with a default date of the current date (the date will likely be changed by the operator). Text may be associated with the status. Multiple status lines are possible, display at least two.

Module Help

This screen supports the update and retrieval functions for the Sample Analysis Plan (SAP) upon which the individual liquid effluent sampling activities are based. The screen is used to define a SAP and its association to a QAPP. The status of the SAP may also be updated from this screen.

To store a new SAP:

1. Enter the SAP identifier. This identifier may be up to 20 characters in length. The identifier must be unique or an error will occur. The field is required.

2. TAB and enter the title of the SAP. The title may be from one to 40 characters in length and is required.

3. TAB to the REV field. This is the revision identifier of the SAP. The field is required. A default value of zero is displayed. To accept the default, press the ENTER key. To enter a different revision level, key the revision number over the default and press ENTER. (A number is required.)

The Text? flag indicates whether free-form text is associated with the requirement. If the flag is set to 'N', no text is present. To add text, press the TEXT key (F7). A popup screen will appear that will permit you to enter as much text as desired. Several different types of text may be available. Once the text has been stored, the text flag will be set to 'Y'. Additional text processing assistance can be obtained by pressing CTRL/K while the text popup window is being displayed.

4. Each SAP MUST be assigned to a QAPP. For example, SAP WHC-SD-FF-PLN-002 may be assigned to QAPP WHC-SD-WM-QAPP-011. To associate a SAP with its responsible QAPP:
Module Help

1. Press the PAGE DOWN key to move the cursor to the QAPP ID field of the Responsible QAPP block.
2. Enter the identifier of the QAPP, if known. If not known, press LOV (F9) to display a list of available QAPPs:
   1) Press the down arrow key until the cursor points to the desired QAPP.
   2) Press the ENTER key to select the QAPP. The QAPP and its information will be displayed on the screen.
3. Press the COMMIT key (F10) to store the data in the database.

To update an existing SAP:

1. Press the ENTER QY key (F12).
2. Enter the identifier of the SAP to be updated. If you only know part of the identifier, enter that part followed by a percent sign (%). This will cause those SAPs that begin with the partial identifier to be queried.
3. Press the RUN QY key (Shift/F12). The SAP will be displayed on the screen; if more than one SAP was queried, the first one matching the query will be displayed. To locate the desired SAP:
   a. Press the down arrow key until the desired SAP is displayed.
4. Press the TAB key until the cursor is at the field to be modified.
5. Enter the new data in the field and press ENTER.
6. If more than one field is to be updated, repeat the above process for each field.
7. Press the COMMIT key (F10) to store the changes in the database.

If the text associated with the SAP is to be modified:

1. Press the TEXT key (F7). The default description text will be displayed. If you wish to modify another text type:
   a. Press LOV (F9) to display the other text options.
   b. Use the down arrow key to move the cursor to the desired text type.
   c. Press ENTER to select the desired text type. The text for that text type will be displayed.
2. Press the PAGE DOWN key to move the cursor to the text block.
3. Use the up and down arrow keys to move the cursor to the line to be modified. Change the text as required. If special editing of text is necessary, use the KEY HELP (Shift/F1) to display the editing keys available.
4. Press the COMMIT key (F10) to update the database.

SAPs may not be deleted if subordinate sample schedules or Sample Analysis Forms (SAF) are present. To delete a SAP:
Module Help

1. Press the ENTER QY key (F12).
2. Enter the identifier of the SAF to be deleted.
3. Press the RUN QY key (Shift/F12). The SAF will be displayed on the screen.
4. Press the DELETE grey key. The screen should clear.
5. Press the COMMIT key (F10) to update the database.

Each SAP MUST be assigned to a QAPP. For example, SAP WHC-SD-FF-PLN-002 may be assigned to QAPP WHC-SD-WM-QAPP-011.

To associate a SAP with its responsible QAPP:

1. Press the PAGE DOWN key to move the cursor to the QAPP ID field of the Responsible QAPP block.
2. Enter the identifier of the QAPP, if known. If not known, press LOV (F9) to display a list of available QAPPs:
   a. Press the down arrow key until the cursor points to the desired QAPP.
   b. Press the ENTER key to select the QAPP. The QAPP and its information will be displayed on the screen.
3. Press the COMMIT key (F10) to store the association of the SAP to its QAPP in the database.

To change the association between a SAP and its QAPP:

1. Press the PAGE DOWN key to move the cursor to the QAPP ID field of the Responsible QAPP block.
2. Enter the identifier of the new QAPP, if known. If not known, press LOV (F9) to display a list of available QAPPs:
   a. Press the down arrow key until the cursor points to the desired QAPP.
   b. Press the ENTER key to select the QAPP. The QAPP and its information will be displayed on the screen.
3. Press the COMMIT key (F10) to complete the update of the database.

The status of each SAP is tracked in the SAP Status block. Here you may identify the different types of status conditions and the dates on which the condition occurs. Unlimited text may be added to clarify the status condition. To add a new status condition:

1. Press the PAGE DOWN key to move the cursor to the first status line.

Each SAP identifies special analysis classes, analysis classes, and analytical methods that are to be used to analyze the constituents at the waste locations identified by the SAP. One or more items may
be defined. NOTE: Only the items identified in the QAPP are allowed to be defined in the SAP. The LOV will display only this restricted list.

To identify an analysis item being used by the SAP:

1. Press the PAGE DOWN key until the cursor is at the METHOD ID field of the Methods In SAP block.

---

Each SAP identifies one or more specific locations where sampling will take place. Locations to be selected must have previously been entered into the LEMIS location list.

To add a location to a SAP:

1. Press the PAGE DOWN key until the cursor is at the LOCATION ID field in the Locations For A SAP block.

---

Persons may be associated with a SAP. This information is used by the subsequently created SAFs to identify the default customer and OSM coordinators. Normally only two persons are identified.

To store person data with the SAP:

1. Press the PAGE DOWN key until the cursor is located at the NAME field of the Persons Associated With SAP block.
2. Enter the name, title, phone, and mailstop of the person. (All of these fields are optional)
3. Use the TAB key to move the cursor to the 'Rel' (relationship) field. Enter CUS if this is the customer, or OSM if this is the OSM coordinator. CUS is the default. Only ONE person may be assigned to each of these relationships.

---

UNIT TEST CHECKLIST

( ) Module Help

---

Function Key

- Show Version : Shift-F10
- Comment/Bug : Shift-F3
- Fast Access : F5
- Back : F4 or Esc
- Main Menu : Shift-F4
- Key Template : Ctrl-F1
- Context Prnt : F11
- Query Prnt : Ctrl-F11
- Oracle Prnt : Shift-F11

---

( ) Block Title: SAP
Block Table: EVENT
## Block Title: SAP
### Block Table: EVENT

<table>
<thead>
<tr>
<th>Key</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help</td>
<td>: F1</td>
</tr>
<tr>
<td>Online Doc</td>
<td>: F2</td>
</tr>
<tr>
<td>Related Data</td>
<td>: F3</td>
</tr>
<tr>
<td>Spec Func 1</td>
<td>: Shift-F5</td>
</tr>
<tr>
<td>Spec Func 2</td>
<td>: Ctrl-F5</td>
</tr>
<tr>
<td>Clear Field</td>
<td>: F8</td>
</tr>
<tr>
<td>Clear Form</td>
<td>: Shift-F8</td>
</tr>
<tr>
<td>Home/End</td>
<td>: Home/End</td>
</tr>
<tr>
<td>Prev/Next Block</td>
<td>: PgDn/PgUp</td>
</tr>
<tr>
<td>Prev/Next Field</td>
<td>: Tab/Sh-Tb</td>
</tr>
<tr>
<td>Commit Form</td>
<td>: F10</td>
</tr>
<tr>
<td>Enter Query</td>
<td>: F12</td>
</tr>
<tr>
<td>Correct Query Fields?</td>
<td>: Ctrl-F12</td>
</tr>
<tr>
<td>Execute Qry</td>
<td>: Shift-F12</td>
</tr>
</tbody>
</table>

## Block Title: Responsible QAPP
### Block Table: EVENT_NEST

<table>
<thead>
<tr>
<th>Key</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help</td>
<td>: F1</td>
</tr>
<tr>
<td>Online Doc</td>
<td>: F2</td>
</tr>
<tr>
<td>Related Data</td>
<td>: F3</td>
</tr>
<tr>
<td>Spec Func 1</td>
<td>: Shift-F5</td>
</tr>
<tr>
<td>Spec Func 2</td>
<td>: Ctrl-F5</td>
</tr>
<tr>
<td>Clear Field</td>
<td>: F8</td>
</tr>
<tr>
<td>Clear Form</td>
<td>: Shift-F8</td>
</tr>
<tr>
<td>Home/End</td>
<td>: Home/End</td>
</tr>
<tr>
<td>Prev/Next Block</td>
<td>: PgDn/PgUp</td>
</tr>
<tr>
<td>Prev/Next Field</td>
<td>: Tab/Sh-Tb</td>
</tr>
<tr>
<td>Commit Form</td>
<td>: F10</td>
</tr>
<tr>
<td>Enter Query</td>
<td>: F12</td>
</tr>
<tr>
<td>Correct Query Fields?</td>
<td>: Ctrl-F12</td>
</tr>
<tr>
<td>Execute Qry</td>
<td>: Shift-F12</td>
</tr>
</tbody>
</table>

### Key Functions
- **Help**: F1
- **Key Help**: Shift-F1
- **Online Doc**: F2
- **Dis Journal**: Shift-F2
- **Related Data**: F3
- **Edit Text**: F7
- **Spec Func 1**: Shift-F5
- **Spec Func 2**: Ctrl-F5
- **Clear Field**: F8
- **Clear Record**: Shift-F8
- **Clear Form**: Shift-F8
- **Home/End**: Home/End
- **Prv/Nxt Block**: PgDn/PgUp
- **Prev/Next Field**: Tab/Sh-Tb
- **Commit Form**: F10
- **Enter Query**: F12
- **Correct Query Fields?**: Ctrl-F12
- **Execute Qry**: Shift-F12
- **Insert Rec**: Insert
- **Add record at end**: Shift-F8
- **Mandatory checks OK?**: Validation checks OK?
- **List of Values OK?**: Duplicate Fld: Shift-F6
- **Duplicate Rec**: F6
- **Duplicate checks OK?**: Shift-F6
- **Optional fields marked?**: Correct fields uppercase
- **Insert Rec**: Insert
- **Home/End**: Home/End
- **Prev/Next Rec**: Up/Down
- **Commit Form**: F10
- **Clear Form**: Shift-F8
- **Clear Record**: Shift-F8
- **Clear System**: Ctrl-F4
- **Enter Query**: F12
- **Correct Query Fields?**: Uppercase and LOVs?
- **Correct Query Order?**: Shift-F8
- **Delete Record**: Delete
- **Commit Form**: F10
- **Clear Field**: F8
- **Clear System**: Ctrl-F4

---

**Insert Rec**: Insert
**Add record at end**: Shift-F8
**Mandatory checks OK?**: Validation checks OK?
**List of Values OK?**: Duplicate Fld: Shift-F6
**Duplicate Rec**: F6
**Duplicate checks OK?**: Shift-F6
**Optional fields marked?**: Correct fields uppercase
**Delete Record**: Delete

---

**Commit Form**: F10
**Clear Field**: F8
**Clear Record**: Shift-F8
**Clear System**: Ctrl-F4

---

**Insert Rec**: Insert
**Add record at end**: Shift-F8
**Mandatory checks OK?**: Validation checks OK?
**List of Values OK?**: Duplicate Fld: Shift-F6
**Duplicate Rec**: F6
**Duplicate checks OK?**: Shift-F6
**Optional fields marked?**: Correct fields uppercase
**Delete Record**: Delete
Block Title: Methods In SAP
Block Table: EVENT-METHOD-J

Help : F1
Online Doc : F2
Related Data : F3
Spec Func 1 : Shift-F5

Enter Query : F12
Correct Query Fields? : Uppercase and LOVs?
Execute Qry : Shift-F12:
Optional fields marked? : Correct fields uppercase:

Delete Record: Delete:

Help : F1
Online Doc : F2
Related Data : F3
Spec Func 1 : Shift-F5

Home/End : Home/End
Scroll Up/Dn : Shift-Up/Dn:
Prv/Nxt Rec : Up/Down
Commit Form : F10

Clear Field : F8
Clear Form : Shift-F8
Exit System : Ctrl-F4

Insert Rec : Insert
Mandatory checks OK? : Validation checks OK?
List of Values OK? : Duplicate Fld: Shift-F6:
Duplicate Rec: F6
Optional fields marked? : Correct fields uppercase:

Delete Record: Delete:
Block Title: Stream Locations  
Block Table: EVENT-LOCATION-J  

<table>
<thead>
<tr>
<th>Command</th>
<th>Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help</td>
<td>F1</td>
<td>Key Help</td>
</tr>
<tr>
<td>Online Doc</td>
<td>F2</td>
<td>Dis Journal</td>
</tr>
<tr>
<td>Related Data</td>
<td>F3</td>
<td>Edit Text</td>
</tr>
<tr>
<td>Spec Func 1</td>
<td>Shift-F5</td>
<td>Spec Func</td>
</tr>
<tr>
<td>Prv/Nxt Block</td>
<td>PgDn/PgUp:</td>
<td>Prv/Nxt Block</td>
</tr>
<tr>
<td>Prv/Nxt Field</td>
<td>Tab/Sh-Tb:</td>
<td>Prv/Nxt Field</td>
</tr>
<tr>
<td>Clear Field</td>
<td>F8</td>
<td>Clear Record</td>
</tr>
<tr>
<td>Clear Form</td>
<td>Shift-F8</td>
<td>Exit System</td>
</tr>
<tr>
<td>Enter Query</td>
<td>F12</td>
<td>Add record at end</td>
</tr>
<tr>
<td>Correct Query Fields?</td>
<td>Shift-F12:</td>
<td>Correct Query Order?</td>
</tr>
<tr>
<td>Insert Rec</td>
<td>Insert</td>
<td>Mandatory checks OK?</td>
</tr>
<tr>
<td>List of Values OK?</td>
<td>Shift-F6:</td>
<td>Duplicate Fld</td>
</tr>
<tr>
<td>Duplicate Rec</td>
<td>F6</td>
<td>Duplicate checks OK?</td>
</tr>
<tr>
<td>Optional fields marked?</td>
<td>Shift-F12:</td>
<td>Correct fields uppercase</td>
</tr>
<tr>
<td>Delete Record</td>
<td>Delete :</td>
<td>Delete Record</td>
</tr>
</tbody>
</table>

---

Block Title: Sampling Locations  
Block Table: EVENT-LOCATION-J  

<table>
<thead>
<tr>
<th>Command</th>
<th>Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help</td>
<td>F1</td>
<td>Key Help</td>
</tr>
<tr>
<td>Online Doc</td>
<td>F2</td>
<td>Dis Journal</td>
</tr>
<tr>
<td>Related Data</td>
<td>F3</td>
<td>Edit Text</td>
</tr>
<tr>
<td>Spec Func 1</td>
<td>Shift-F5</td>
<td>Spec Func</td>
</tr>
<tr>
<td>Prv/Nxt Block</td>
<td>PgDn/PgUp:</td>
<td>Prv/Nxt Block</td>
</tr>
<tr>
<td>Prv/Nxt Field</td>
<td>Tab/Sh-Tb:</td>
<td>Prv/Nxt Field</td>
</tr>
<tr>
<td>Clear Field</td>
<td>F8</td>
<td>Clear Record</td>
</tr>
<tr>
<td>Clear Form</td>
<td>Shift-F8</td>
<td>Exit System</td>
</tr>
<tr>
<td>Enter Query</td>
<td>F12</td>
<td>Add record at end</td>
</tr>
<tr>
<td>Correct Query Fields?</td>
<td>Shift-F12:</td>
<td>Correct Query Order?</td>
</tr>
<tr>
<td>Insert Rec</td>
<td>Insert</td>
<td>Mandatory checks OK?</td>
</tr>
<tr>
<td>List of Values OK?</td>
<td>Shift-F6:</td>
<td>Duplicate Fld</td>
</tr>
<tr>
<td>Duplicate Rec</td>
<td>F6</td>
<td>Duplicate checks OK?</td>
</tr>
<tr>
<td>Optional fields marked?</td>
<td>Shift-F12:</td>
<td>Correct fields uppercase</td>
</tr>
<tr>
<td>Delete Record</td>
<td>Delete :</td>
<td>Delete Record</td>
</tr>
</tbody>
</table>

---

( ) Help : F1 : ( ) Key Help : Shift-F1 :  
( ) Online Doc : F2 : ( ) Dis Journal : Shift-F2 :  
( ) Related Data : F3 : ( ) Edit Text : F7 :  
( ) Spec Func 1 : Shift-F5 : ( ) Spec Func 2 : Ctrl-F5 :  
( ) Home/End : Home/End : ( ) Prv/Nxt Block : PgDn/PgUp :  
( ) Scroll Up/Dn : Shift-Up/Dn : ( ) Prv/Nxt Field : Tab/Sh-Tb :  
( ) Prv/Nxt Rec : Up/Down : ( ) Commit Form : F10 :  
( ) Clear Field : F8 : ( ) Clear Record : Shift-F8 :  
( ) Clear Form : Shift-F8 : ( ) Exit System : Ctrl-F4 :  
( ) Insert Rec : Insert : ( ) Add record at end :  
( ) Correct Query Fields? : ( ) Uppercase and LOVs? :  
( ) List of Values OK? : ( ) Duplicate Fld : Shift-F6 :  
( ) Duplicate Rec : F6 : ( ) Duplicate checks OK? :  
( ) Optional fields marked? : ( ) Correct fields uppercase :  
( ) Delete Record : Delete :
Block Title: Persons Associated With SAP
Block Table: EVENT_PERSON

Block Title: Organizations Associated With Event
Block Table: EVENT_ORGAN_J
TEST PLAN

Testing of the transaction is performed at four levels:

1. Developer testing.
2. Secondary testing.
3. End user testing.
4. Production release & verification.

As each applicable section of this test plan is completed, the designated individual responsible for the section will sign the plan in the appropriate places. Each check off item will be completed. The status of the transaction will be updated in the data dictionary as the transaction progresses through the development and test steps.

Developer Testing

As each individual transaction is generated, the developer performs tests against the transaction to insure that it meets specifications and works properly. Upon successful completion of this testing, the transaction is made available for secondary testing.

Test status conditions are:

( ) 1 - Transaction under development, untested.
( ) 2 - Development complete, initial unit testing in progress.
( ) 3 - Initial unit testing complete.

Secondary Testing

Secondary testing is performed by a person external to the development team. Tests are performed using a standardized test checklist. Initial testing is performed to ensure that the transaction meets the functional requirements of the transaction and satisfies the test plan narrative that follows.

( ) 4 - Secondary testing in progress.
( ) 5 - Secondary testing complete, problems found. Resolution in progress.
( ) 6 - Unable to resolve problem at this time.
( ) 7 - Problem resolution complete.

Date Complete: 4/1/83

Developer:

10
When problems are found:

1. The tester passes the checklist to the project manager for review and action.
2. The project manager assigns the checklist to the developer of the transaction for correction of the problems.
3. The developer corrects the described problems, records the corrective actions taken and the number of hours of corrective effort used, tests the transaction for correct operation, and returns the checklist to the project manager.
4. The project manager returns the checklist to the tester for retesting.

The above sequence of events repeats until the tester signs off the transaction as passing the test requirements.

End User Testing

The transaction is tested by end users for a predetermined time period. This testing is done in the development environment. If no problems are encountered, or all problems are resolved at the end of this time period, the module is ready for Project Manager review.

- 9 - End User testing in progress.
- 10 - Problem found, resolution in progress.
- 11 - Problem resolution complete.
- 12 - Resolution verified.

Developer ______________________ Date Complete ______
Tester ______________________ Date Complete ______

Production Status

- 13 - Ready for Project Manager/System Architect review.
- 14 - The transaction is ready to be placed into production.
- 15 - The transaction has been put into production

By ______________________ Date Done ______

( ) 9 - End User testing in progress.
( ) 10 - Problem found, resolution in progress.
( ) 11 - Problem resolution complete.
( ) 12 - Resolution verified.
Module Test Plan

Display transaction help. Verify that the narrative adequately describes the purpose and functions of the transaction in end-user terms.

Transaction help describes:
1. Purpose of the transaction
2. Functions performed by the transaction
3. Where multiple block, what happens in each block.

Block Title: SAP
Block Table: EVENT
Block Usage: Full Function

Block Help

This tables stores data relating to an event, including the event identifier, title, event type and related text flag.
An event is defined as a TPA Requirement, Project, QAPP, Task, SAP, or SAF.
Block Test Plan

(✓) Block help describes:

✓ Purpose of the block
✓ Options available in the block
✓ The relationship of the block to the transaction or to
  the principal parent block of the transaction
✓ Navigation to other blocks of the transaction

✓ Where block synchronization is used, ensure that the block data
  is in sync with the parent block.

✓ Query a single record:

✓ A single record is retrieved.
✓ Pressing the F12 key clears the record and permits entering
  a second query.
✓ The second query successfully retrieves the desired data.

✓ Query multiple records using wild cards:

✓ Pressing F12 clears the block and makes the block ready for
  a query.
✓ A query composed of a trailing % wildcard retrieves the
  desired data.
✓ A query using a prefix % wildcard retrieves the correct
  data.
✓ A query using both prefix and suffix % wildcards retrieves
  the correct data.
✓ A query using the underscore (_) position wildcard retrieves
  the correct data.

✓ Verify that the data queries in the block are ordered logically.

✓ Store a series of records using the F6 [duplicate record] key to
  carry forward field values from the previously stored record.

✓ Attempting to store the duplicated record without change
  should result in an error.
✓ Change key fields and store the record. It should store
  successfully.

✓ Update a record:

✓ The change count should increment.
✓ The date updated should become the current date.
✓ An error should occur if the operator owner identifier does
  not match the data owner identifier.
Field Prompt: SAP ID
Field Usage: Updateable
Field Name: IDENT_EVENT

Field Help

This field uniquely identifies the event (Requirement, Project, QAPP, SAP, or SAF) to the database. An error will occur if you attempt to enter a identification value already present in the database.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

(*) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

(*) Enter data beyond the length of the field:
(  ) If autoskip is in effect, cursor will skip to the next field.
(  ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

(*) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

(*) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
(  ) Change the field, committing after each change.
(  ) Change the field where a range of valid values exists:
(  ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
(  ) Value above valid range should display message COM00101 or COM00103 (if no LOV).
(  ) Minimum value within the range should be accepted.
(  ) Maximum value within the range should be accepted.
(  ) Random value within the range should be accepted.

(*) Enter query mode and verify that this field is accessible.

(*) Enter query mode and enter a valid value in this field.
(  ) Only records matching the entered value should be displayed.

(*) Attempt to delete an existing data field value. An error should result when <F10> or <Enter> are pressed.
( ) Use the space bar to attempt to delete the field data.
( ) Use clear field (F8) to attempt to delete the field data.

( ) Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.

( ) Enter a duplicate value. An error should occur.

( ) From LOV, select a value already present in the database. An error should occur.
Field Prompt: Title
Field Usage: Updateable
Field Name: TITLE EVENT

Field Help
Enter a 1-40 character descriptive title for the event.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

(✓) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

(✓) Enter data beyond the length of the field:
   (✓) If autoskip is in effect, cursor will skip to the next field.
   (✓) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

(✓) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

(✓) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.

(✓) Change the field, committing after each change:
   (✓) Value below valid range should display message COM00101 or COM00103 (if no LOV).
   (✓) Value above valid range should display message COM00101 or COM00103 (if no LOV).
   (✓) Minimum value within the range should be accepted.
   (✓) Maximum value within the range should be accepted.
   (✓) Random value within the range should be accepted.

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.
(✓) Only records matching the entered value should be displayed.

(✓) Attempt to delete an existing data field value. An error should result when <F10> or <Enter> are pressed.
(✓) Use the space bar to attempt to delete the field data.
(✓) Use clear field (F8) to attempt to delete the field data.
Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.
Field Prompt: Rev
Field Usage: Updateable
Field Name: REV_EVENT

Field Help
The field contains the code of the latest revision of the event. The code may be a numeric value from 0 through 999.

Field Test Plan

(✓) Attempt to store alphabetic characters in the field. An error should result.

(✓) Begin the field entry with a space. An error should result.

(✓) Attempt to enter a longer data value than allowed.

(✓) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

(✓) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.

(✓) Change the field, committing after each change:
   (✓) Value below valid range should display message COM00101 or COM00103 (if no LOV).
   (✓) Value above valid range should display message COM00101 or COM00103 (if no LOV).
   (✓) Minimum value within the range should be accepted.
   (✓) Maximum value within the range should be accepted.
   (✓) Random value within the range should be accepted.

✓ Enter query mode and verify that this field is accessible.

✓ Enter query mode and enter a valid value in this field.

✓ Only records matching the entered value should be displayed.

✓ Accept the default.

✓ Modify each default value with a valid alternative.

✓ Modify each default value with an invalid alternative.

✓ Attempt to delete an existing data field value. An error should result when <F10> or <Enter> are pressed.
   ✓ Use the space bar to attempt to delete the field data.
   ✓ Use clear field (F8) to attempt to delete the field data.
(1) Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.

(2) Test LOV:
   ( ) Select the first entry in the LOV.
   ( ) Select the last entry in the LOV.
   ( ) Use the FIND option and select an entry.
Field Prompt: Text?
Field Usage: QUERYABLE only
Field Name: FLAG_TEXT

Field Help

This field is a flag that identifies the presence of additional textual information about the data item. If "N" is displayed, no text is currently present. If "Y" is displayed, text of one or more types is present. To enter or display text, press F7. A popup screen will display the default text type for the data item. If this default text type is the one you want, you may either read or add text. If you want to use another available text type for the data item, press LOV (F9) to display and select the desired text type. Once you have entered any text into the database, the indicator flag for the data item will be set to "Y".

Field Test Plan

(1) Enter query mode and verify that this field is accessible.

(2) Enter query mode and enter a valid value in this field.

(3) Only records matching the entered value should be displayed.

(4) Test LOV:

(4a) Select the first entry in the LOV.

(4b) Select the last entry in the LOV.

(4c) Use the FIND option and select an entry.

(5) Press the TEXT key (F7). The text popup should be displayed.

(6) With the cursor at the text type, press LOV (F9). Where available, a list of other text types available for the entry will be displayed. Select one text type for testing.

(7) Press the ENTER key to move the cursor to the text block.

(8) Enter two lines of text. The cursor should automatically move to the next line when one line is full.

(9) Press the COMMIT key (F10). Press ENTER in response to prompt
until the popup disappears and the primary screen reappears.

(1) The text flag should be set to 'Y'.

(2) Select and update text that already exists.
Block Title: Responsible QAPP
Block Table: EVENT NEST
Block Usage: Undefined

Block Help

This table permits the linking of one sampling event to another. In this way, a hierarchy of events may be defined. For example, one event may be defined that is a TPA requirement. From that event, a QAPjP is defined as a subordinate event. The QAPjP has one or more SAPs that make up another subordinate level of events. From each of the SAPs, individual actual sampling events may be defined. This hierarchy permits extending reports so that the same report may produce output for any of the levels described above. This reduces the cost of reporting and can associate multiple related events within the same report.

Block Test Plan

( ) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

( / ) Block help describes:

( / ) Purpose of the block
( / ) Options available in the block
( / ) The relationship of the block to the transaction or to the principal parent block of the transaction
( / ) Navigation to other blocks of the transaction

( ) Where block synchronization is used, ensure that the block data is in sync with the parent block.

( ) Query a single record:

( ) A single record is retrieved.
( ) Pressing the F12 key clears the record and permits entering a second query.
( ) The second query successfully retrieves the desired data.

( ) Query multiple records using wild cards:

( ) Pressing F12 clears the block and makes the block ready for a query.
( ) A query composed of a trailing % wildcard retrieves the desired data.
( ) A query using a prefix % wildcard retrieves the correct data.
( ) A query using both prefix and suffix % wildcards retrieves the correct data.
A query using the underscore (_ ) position wildcard retrieves the correct data.

Verify that the data queries in the block are ordered logically.

Store a series of records using the F6 [duplicate record] key to carry forward field values from the previously stored record.

Attempting to store the duplicated record without change should result in an error.

Change key fields and store the record. It should store successfully.

Field Prompt: QAPP ID
Field Usage: Queryable Only
Field Name: IDENT_EVENT

Field Help

This field uniquely identifies the event (Requirement, Project, QAPP, SAP, or SAF) to the database.
An error will occur if you attempt to enter a identification value already present in the database.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

Enter query mode and verify that this field is accessible.

Enter query mode and enter a valid value in this field. Only records matching the entered value should be displayed.

Enter a duplicate value. An error should occur.

From LOV, select a value already present in the database. An error should occur.
Block Title: SAP Status
Block Table: LEMIS STATUS
Block Usage: Full Function

Block Help
---------------------------------------------------
This table stores data relating to the status of the events. As the
status of the event changes, this table is updated and stores past,
current, and future status dates that have been entered for a specific
event.

Block Test Plan
---------------------------------------------------

 tengo display block help. Verify that the narrative adequately
describes the purpose and functions of the block in end-user
terms:

- Display block help:
  - Purpose of the block
  - Options available in the block
  - The relationship of the block to the transaction or to
    the principal parent block of the transaction
  - Navigation to other blocks of the transaction

- Where block synchronization is used, ensure that the block data
  is in sync with the parent block.

- Query a single record:
  - A single record is retrieved.
  - Pressing the F12 key clears the record and permits entering
    a second query.
  - The second query successfully retrieves the desired data.

- Query multiple records using wild cards:
  - Pressing F12 clears the block and makes the block ready for
    a query.
  - A query composed of a trailing % wildcard retrieves the
    desired data.
  - A query using a prefix % wildcard retrieves the correct
    data.
  - A query using both prefix and suffix % wildcards retrieves
    the correct data.
  - A query using the underscore (-) position wildcard retrieves
    the correct data.

- Verify that the data queries in the block are ordered logically.
- Store a series of records using the F6 [duplicate record] key to
carry forward field values from the previously stored record.

Attempting to store the duplicated record without change should result in an error.

Change key fields and store the record. It should store successfully.

Update a record:

- The change count should increment.
- The date updated should become the current date.
- An error should occur if the operator owner identifier does not match the data owner identifier.

Field Prompt: Status
Field Usage: Non Updateable
Field Name: TYPE_STATUS

Field Help

Enter the 4-character code that identifies the nature of the date information entered.
As a general convention, the first character of the field should contain, when appropriate:

S - SCHEDULED
A - ACTUAL
R - RESCHEDULED

The second and third characters should contain:

SA - SAMPLE
TR - TRANSPORT
LA - LAB
RE - RESULT
VA - VALIDATION
VE - VERIFICATION

The forth character should contain:

B - BEGIN
E - END

Examples: SSAB = SCHEDULED SAMPLE BEGIN
ALAE = ACTUAL LAB END

This data field:
- Provides a default value. To accept the default value, press the ENTER key or TAB key.
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.
Field Test Plan

( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Attempt to change data in the field. An error should result.
   ( ) Use the spacebar to attempt to change data.
   ( ) Use the clear field key (F8) to attempt to change data.

( ) Attempt to delete data in the field. An error should result.
   ( ) Use the spacebar to attempt to delete data.
   ( ) Use the clear field key (F8) to attempt to delete data.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Accept the default.

( ) Modify each default value with a valid alternative.

( ) Modify each default value with an invalid alternative.

( ) Attempt to delete an existing data field value. An error should result when <F10> or <Enter> are pressed.
   ( ) Use the space bar to attempt to delete the field data.
   ( ) Use clear field (F8) to attempt to delete the field data.

( ) Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.

( ) Test LOV:
   ( ) Select the first entry in the LOV.
   ( ) Select the last entry in the LOV.
   ( ) Use the FIND option and select an entry.

( ) Enter a duplicate value. An error should occur.

( ) From LOV, select a value already present in the database. An error should occur.
error should occur.

Field Prompt: Description
Field Usage: Queryable Only
Field Name: DESCRIPTION

Field Help
Enter a 1-30 character description of the LEMIS status code.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.
( ) Enter a duplicate value. An error should occur.
( ) From LOV, select a value already present in the database. An error should occur.
Field Prompt: Date
Field Usage: Updateable
Field Name: DATE_STATUS

Field Help

- Enter the date for the event status selected.

This data field:
- Provides a default value. To accept the default value, press the ENTER key or TAB key.
- Must contain a valid value. A blank is not allowed.
- Date data must be entered in the format mm/dd/yy
  where:
    mm = the month of the year; months prior to 10 should have a leading zero, e.g., May should be 05
    dd = the day of the month; days prior to 10 should have a leading zero, e.g., May 1 should be shown as 01
    yy = the last two digits of the calendar year, e.g., 1992 is entered as 92.
- Contents are automatically generated by the system.

Field Test Plan

1. (✓) Verify that the field only allows valid dates.
2. (✓) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.
3. (✓) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
4. (✓) Change the field, committing after each change.
5. (✓) Change the field where a range of valid values exists:
   - Value below valid range should display message COM00101 or COM00103 (if no LOV).
   - Value above valid range should display message COM00101 or COM00103 (if no LOV).
   - Minimum value within the range should be accepted.
   - Maximum value within the range should be accepted.
   - Random value within the range should be accepted.
6. (✓) Enter query mode and verify that this field is accessible.
7. (✓) Enter query mode and enter a valid value in this field.
   - Only records matching the entered value should be displayed.
8. (✓) Accept the default.
9. (✓) Modify each default value with a valid alternative.
(1) Modify each default value with an invalid alternative.

(2) Attempt to delete an existing data field value. An error should result when <F10> or <Enter> are pressed.

(3) Use the space bar to attempt to delete the field data.

(4) Use clear field (F8) to attempt to delete the field data.

(5) Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.
Field Prompt: Text?
Field Usage: Queryable Only
Field Name: FLAG_TEXT

Field Help
This field is a flag that identifies the presence of additional textual information about the data item. If "N" is displayed, no text is currently present. If "Y" is displayed, text of one or more types is present. To enter or display text, press F7. A popup screen will display the default text type for the data item. If this default text type is the one you want, you may either read or add text. If you want to use another available text type for the data item, press LOV (F9) to display and select the desired text type. Once you have entered any text into the database, the indicator flag for the data item will be set to "Y".

This data field:
- Provides a default value. To accept the default value, press the ENTER key or TAB key.
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.
(✓) Only records matching the entered value should be displayed.

(✓) Test LOV:
(✓) Select the first entry in the LOV.
(✓) Select the last entry in the LOV.
(✓) Use the FIND option and select an entry.

(✓) Press the TEXT key (F7). The text popup should be displayed.

(✓) With the cursor at the text type, press LOV (F9). Where available, a list of other text types available for the entry will be displayed. Select one text type for testing.

(✓) Press the ENTER key to move the cursor to the text block.

(✓) Enter two lines of text. The cursor should automatically move to the next line when one line is full.

(✓) Press the COMMIT key (F10). Press ENTER in response to prompt
until the popup disappears and the primary screen reappears.

(�) The text flag should be set to 'Y'.

(�) Select and update text that already exists.
Block Title: Methods in SAP
Block Table: EVENT METHOD
Block Usage: Undefined

Block Test Plan

Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

Block help describes:

- Purpose of the block
- Options available in the block
- The relationship of the block to the transaction or to the principal parent block of the transaction
- Navigation to other blocks of the transaction

Where block synchronization is used, ensure that the block data is in sync with the parent block.

Query a single record:

- A single record is retrieved.
- Pressing the F12 key clears the record and permits entering a second query.
- The second query successfully retrieves the desired data.

Query multiple records using wild cards:

- Pressing F12 clears the block and makes the block ready for a query.
- A query composed of a trailing % wildcard retrieves the desired data.
- A query using a prefix % wildcard retrieves the correct data.
- A query using both prefix and suffix % wildcards retrieves the correct data.
- A query using the underscore (_) position wildcard retrieves the correct data.

Verify that the data queries in the block are ordered logically.

Store a series of records using the F6 [duplicate record] key to carry forward field values from the previously stored record.

- Attempting to store the duplicated record without change should result in an error.
Change key fields and store the record. It should store successfully.

Field Prompt: Method ID
Field Usage: Queryable Only
Field Name: IDENT_METHOD

Field Help
This field uniquely identifies the method to the database. An error will occur if you attempt to enter a identification value already present in the database.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

\((\checkmark)\) Enter query mode and verify that this field is accessible.

\((\checkmark)\) Enter query mode and enter a valid value in this field. Only records matching the entered value should be displayed.

\((\checkmark)\) Enter a duplicate value. An error should occur.

\((\checkmark)\) From LOV, select a value already present in the database. An error should occur.
Field Prompt: Title
Field Usage: Queryable Only
Field Name: TITLE_METHOD

Field Help

Enter a 1-40 character title for the data item. The title should be as descriptive as possible. It will be placed in the database in all caps form.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

Enter query mode and verify that this field is accessible.

Enter query mode and enter a valid value in this field.
   Only records matching the entered value should be displayed.

Enter a duplicate value. An error should occur.

From LOV, select a value already present in the database. An error should occur.
Block Title: Stream Locations
Block Table: EVENT LOCATION
Block Usage: Undefined

Block Help

Block Test Plan

(/) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

(/) Block help describes:

(/) Purpose of the block
(/) Options available in the block
(/) The relationship of the block to the transaction or to the principal parent block of the transaction
(/) Navigation to other blocks of the transaction

( ) Where block synchronization is used, ensure that the block data is in sync with the parent block.

( ) Query a single record:

( ) A single record is retrieved.
( ) Pressing the F12 key clears the record and permits entering a second query.
( ) The second query successfully retrieves the desired data.

( ) Query multiple records using wild cards:

( ) Pressing F12 clears the block and makes the block ready for a query.
( ) A query composed of a trailing % wildcard retrieves the desired data.
( ) A query using a prefix % wildcard retrieves the correct data.
( ) A query using both prefix and suffix % wildcards retrieves the correct data.
( ) A query using the underscore (_) position wildcard retrieves the correct data.

( ) Verify that the data queries in the block are ordered logically.

( ) Store a series of records using the F6 [duplicate record] key to carry forward field values from the previously stored record.

( ) Attempting to store the duplicated record without change should result in an error.
( ) Change key fields and store the record. It should store successfully.

Field Prompt: Location ID
Field Usage: Queryable Only
Field Name: IDENT_LOCATION

Field Help

This is the unique LEMIS location identifier. Where applicable, use the WIDS identifier for the waste location. Locations along a waste stream should be given the site stream identifier, followed by a hyphen (-) and a unique numeric suffix. The title will be used for a more descriptive definition of the waste location.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

**Note: If a duplicate Location ID is entered, and error will result. To clear the duplicate record press Ctrl-F8. This will clear the record and allow another entry or query.**

Field Test Plan

( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.
( ) Enter a duplicate value. An error should occur.
( ) From LOV, select a value already present in the database. An error should occur.
Field Prompt: Text?
Field Usage: Queryable Only
Field Name: FLAG_TEXT

Field Help

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Enter a duplicate value. An error should occur.

( ) From LOV, select a value already present in the database. An error should occur.

Field Prompt: Title
Field Usage: Queryable Only
Field Name: TITLE_LOCATION

Field Help

This field contains a 1-40 character descriptive title for the waste location. The field typically expands on the identifier with a descriptive name for the location, e.g., manhole 16.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Enter a duplicate value. An error should occur.

( ) From LOV, select a value already present in the database. An error should occur.
Field Prompt: Description
Field Usage: Queryable Only
Field Name: TITLE-LOCATION

This field contains a 1-40 character descriptive title for the waste location. The field typically expands on the identifier with a descriptive name for the location, e.g., manhole 16.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Enter a duplicate value. An error should occur.

( ) From LOV, select a value already present in the database. An error should occur.
Field Prompt: Ident Location
Field Usage: Queryable Only
Field Name: IDENTLOCATION

Field Help

This is the unique LEMIS location identifier. Where applicable, use the WIDS identifier for the waste location.
Locations along a waste stream should be given the site stream identifier, followed by a hyphen (-) and a unique numeric suffix. The title will be used for a more descriptive definition of the waste location.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

**Note: If a duplicate location ID is entered, and error will result.
To clear the duplicate record press Ctrl-F8. This will clear the record and allow another entry or query.

Field Test Plan

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
  ( ) Only records matching the entered value should be displayed.

( ) Enter a duplicate value. An error should occur.

( ) From LOV, select a value already present in the database. An error should occur.
Field Prompt: Text?
Field Usage: Queryable Only
Field Name: FLAG_TEXT

Field Help

Field Test Plan

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.  
   ( ) Only records matching the entered value should be displayed.

( ) Enter a duplicate value.  An error should occur.

( ) From LOV, select a value already present in the database.  An 
   error should occur.
Block Title: Sampling Locations
Block Table: EVENT LOCATION
Block Usage: Undefined

Block Test Plan

( ) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

( ) Block help describes:

( ) Purpose of the block
( ) Options available in the block
( ) The relationship of the block to the transaction or to the principal parent block of the transaction
( ) Navigation to other blocks of the transaction

( ) Where block synchronization is used, ensure that the block data is in sync with the parent block.

( ) Query a single record:

( ) A single record is retrieved.
( ) Pressing the F12 key clears the record and permits entering a second query.
( ) The second query successfully retrieves the desired data.

( ) Query multiple records using wild cards:

( ) Pressing F12 clears the block and makes the block ready for a query.
( ) A query composed of a trailing % wildcard retrieves the desired data.
( ) A query using a prefix % wildcard retrieves the correct data.
( ) A query using both prefix and suffix % wildcards retrieves the correct data.
( ) A query using the underscore (_) position wildcard retrieves the correct data.

( ) Verify that the data queries in the block are ordered logically.

( ) Store a series of records using the F6 [duplicate record] key to carry forward field values from the previously stored record.

( ) Attempting to store the duplicated record without change should result in an error.
Change key fields and store the record. It should store successfully.

Field Prompt: Location ID  
Field Usage: Queryable Only
Field Name: IDENT_LOCATION

Field Help

This is the unique LEMIS location identifier. Where applicable, use the WIDS identifier for the waste location. Locations along a waste stream should be given the site stream identifier, followed by a hyphen (-) and a unique numeric suffix. The title will be used for a more descriptive definition of the waste location.

**Note:** If a duplicate Location ID is entered, an error will result. To clear the duplicate record press Ctrl-F8. This will clear the record and allow another entry or query.

Field Test Plan

1. Enter query mode and verify that this field is accessible.
2. Enter query mode and enter a valid value in this field. Only records matching the entered value should be displayed.
3. Enter a duplicate value. An error should occur.
4. From LOV, select a value already present in the database. An error should occur.
Field Help:

**Field Prompt:** Text?
**Field Usage:** Queryable Only
**Field Name:** FLAG_TEXT

Field Test Plan:

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Enter a duplicate value. An error should occur.

( ) From LOV, select a value already present in the database. An error should occur.

Field Help:

**Field Prompt:** Title
**Field Usage:** Queryable Only
**Field Name:** TITLE_LOCATION

This field contains a 1-40 character descriptive title for the waste location. The field typically expands on the identifier with a descriptive name for the location, e.g., manhole 16.

Field Test Plan:

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Enter a duplicate value. An error should occur.

( ) From LOV, select a value already present in the database. An error should occur.
Field Prompt: Description
Field Usage: Queryable Only
Field Name: TITLE_LOCATION

Field Help

This field contains a 1-40 character descriptive title for the waste location. The field typically expands on the identifier with a descriptive name for the location, e.g., manhole 16.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.
( ) Enter a duplicate value. An error should occur.
( ) From LOV, select a value already present in the database. An error should occur.
Field Prompt: Ident Location
Field Usage: Queryable Only
Field Name: IDENT_LOCATION

Field Help
This is the unique LEMIS location identifier.
Where applicable, use the WIDS identifier for the waste location.
Locations along a waste stream should be given the site stream
identifier, followed by a hyphen (-) and a unique numeric suffix.
The title will be used for a more descriptive definition of the waste
location.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

**Note: If a duplicate Location ID is entered, an error will result.
To clear the duplicate record press Ctrl-F8. This will clear
the record and allow another entry or query.

Field Test Plan

Enter query mode and verify that this field is accessible.

Enter query mode and enter a valid value in this field.
Only records matching the entered value should be displayed.

Enter a duplicate value. An error should occur.

From LOV, select a value already present in the database. An
error should occur.
Field Prompt: Text?
Field Usage: Queryable Only
Field Name: FLAG_TEXT

Field Help

Field Test Plan

( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.  Only records matching the entered value should be displayed.
( ) Enter a duplicate value.  An error should occur.
( ) From LOV, select a value already present in the database.  An error should occur.
Block Title: Persons Associated With SAP
Block Table: EVENT PERSON
Block Usage: Full Function

Block Help

This table identifies a specific person that is related to a sampling event. The nature of the relationship is determined by the RELATIONSHIP field; valid field values are available through a LOV.

Block Test Plan

( ) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

( ) Block help describes:

( ) Purpose of the block
( ) Options available in the block
( ) The relationship of the block to the transaction or to the principal parent block of the transaction
( ) Navigation to other blocks of the transaction

( ) Where block synchronization is used, ensure that the block data is in sync with the parent block.

( ) Query a single record:

( ) A single record is retrieved.
( ) Pressing the F12 key clears the record and permits entering a second query.
( ) The second query successfully retrieves the desired data.

( ) Query multiple records using wild cards:

( ) Pressing F12 clears the block and makes the block ready for a query.
( ) A query composed of a trailing % wildcard retrieves the desired data.
( ) A query using a prefix % wildcard retrieves the correct data.
( ) A query using both prefix and suffix % wildcards retrieves the correct data.
( ) A query using the underscore (_) position wildcard retrieves the correct data.

( ) Verify that the data queries in the block are ordered logically.

( ) Store a series of records using the F6 [duplicate record] key to carry forward field values from the previously stored record.
Attempting to store the duplicated record without change should result in an error.

Change key fields and store the record. It should store successfully.

Update a record:
- The change count should increment.
- The date updated should become the current date.
- An error should occur if the operator owner identifier does not match the data owner identifier.

Field Prompt: Name
Field Usage: Updateable
Field Name: NAME_PERSON

Field Help
This field contains the name of the person; order first name or initial, middle initials (optional), and last name.

This data field:
- Is optional and may be left empty.
- May contain any character combination.
- All input is converted to upper case.

Field Test Plan
Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

Enter data beyond the length of the field:
- If autoskip is in effect, cursor will skip to the next field.
- If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.

Change the field, committing after each change.

Change the field where a range of valid values exists:
- Value below valid range should display message COM00101 or COM00103 (if no LOV).
- Value above valid range should display message COM00101 or COM00103 (if no LOV).
- Minimum value within the range should be accepted.
- Maximum value within the range should be accepted.
( ) Random value within the range should be accepted.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.

( ) Only records matching the entered value should be displayed.

( ) Skip the field using the TAB key.

( ) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

( ) Delete an existing value. The field should be cleared and stored:

( ) Delete the value using the space bar.

( ) Delete the value using the clear field key (F8).
Field Prompt: Title  
Field Usage: Updateable  
Field Name: TITLE_FUNC_UNIT

Field Help
--------------------------------------------------------
this field contains the name of the organization to which the person belongs.
--------------------------------------------------------

This data field:
- Is optional and may be left empty.
- May contain any character combination.
- All input is converted to upper case.

Field Test Plan
--------------------------------------------------------

( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
( ) Change the field, committing after each change.
( ) Change the field where a range of valid values exists:

( ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
( ) Value above valid range should display message COM00101 or COM00103 (if no LOV).
( ) Minimum value within the range should be accepted.
( ) Maximum value within the range should be accepted.
( ) Random value within the range should be accepted.

( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.
( ) Skip the field using the TAB key.
( ) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null
value.

\( \checkmark \) Delete an existing value. The field should be cleared and stored:

\( \checkmark \) Delete the value using the space bar.

\( \checkmark \) Delete the value using the clear field key (F8).
Field Prompt: Phone
Field Usage: Updateable
Field Name: ADDR_PHONE

Field Help

This field contains the telephone number of the person identified.
Use the full seven-digit telephone number.

This data field:
- Is optional and may be left empty.
- May contain any character combination.
- All input is converted to upper case.

Field Test Plan

( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
   ( ) Change the field, committing after each change.
   ( ) Change the field where a range of valid values exists:
      ( ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
      ( ) Value above valid range should display message COM00101 or COM00103 (if no LOV).
      ( ) Minimum value within the range should be accepted.
      ( ) Maximum value within the range should be accepted.
      ( ) Random value within the range should be accepted.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Skip the field using the TAB key.

( ) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null
Delete an existing value. The field should be cleared and stored:

- Delete the value using the space bar.
- Delete the value using the clear field key (F8).
Field Prompt: M/S
Field Usage: Updateable
Field Name: ADDR_MS

Field Help

This field contains the mail stop code for the person identified.
The mail stop code should be entered as xx-xx.

This data field:
- Is optional and may be left empty.
- May contain any character combination.
- All input is converted to upper case.

Field Test Plan

( ) Verify that the field accepts character or numeric data within
the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
  ( ) If autoskip is in effect, cursor will skip to the next field.
  ( ) If no autoskip, cursor will remain at the end of the field and
      overlay characters, leaving the last character keyed in the
      last position of the field.

( ) Display column help. Verify that the narrative adequately
   describes the column's purpose and functions in end-user terms.

( ) Change the field in an existing record. Verify that the change
   occurred by displaying the record on the screen before and after
   the changes were made.
   ( ) Change the field, committing after each change.
   ( ) Change the field where a range of valid values exists:
       ( ) Value below valid range should display message COM00101 or
           COM00103 (if no LOV).
       ( ) Value above valid range should display message COM00101 or
           COM00103 (if no LOV).
       ( ) Minimum value within the range should be accepted.
       ( ) Maximum value within the range should be accepted.
       ( ) Random value within the range should be accepted.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Skip the field using the TAB key.

( ) Enter data into the field, backspace the data out of the field
   and TAB to the next field. The database should contain a null
Delete an existing value. The field should be cleared and stored:

- Delete the value using the space bar.
- Delete the value using the clear field key (F8).
Field Prompt: Rel
Field Usage: Non Updateable
Field Name: RELATIONSHIP

Field Help
This field contains a three-character code that defines the relationship between this person and the sap. Use LOV to display a list of valid values for this relationship.

This data field:
- Provides a default value. To accept the default value, press the ENTER key or TAB key.
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Attempt to change data in the field. An error should result.
   ( ) Use the spacebar to attempt to change data.
   ( ) Use the clear field key (F8) to attempt to change data.

( ) Attempt to delete data in the field. An error should result.
   ( ) Use the spacebar to attempt to delete data.
   ( ) Use the clear field key (F8) to attempt to delete data.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Attempt to delete an existing data field value. An error should result when <F10> or <Enter> are pressed.
   ( ) Use the space bar to attempt to delete the field data.
   ( ) Use clear field (F8) to attempt to delete the field data.

( ) Enter data into the field, backspace the data out of the field and
attempt to TAB to the next field. An error should occur.

(✓) Test LOV:
   (✓) Select the first entry in the LOV.
   (✓) Select the last entry in the LOV.
   (✓) Use the FIND option and select an entry.

(✓) Enter a duplicate value. An error should occur.
(✓) From LOV, select a value already present in the database. An error should occur.
(✓) Attempt to enter an invalid relationship. An error should occur.
Block Title: Organizations Associated With Event
Block Table: EVENT ORGAN
Block Usage: Undefined

Block Help

This table identifies a specific organization that is related to a sampling event. The nature of the relationship is determined by the RELATIONSHIP field; valid field values are available through a LOV.

Block Test Plan

( ) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

( ) Block help describes:

( ) Purpose of the block
( ) Options available in the block
( ) The relationship of the block to the transaction or to the principal parent block of the transaction
( ) Navigation to other blocks of the transaction

( ) Where block synchronization is used, ensure that the block data is in sync with the parent block.

( ) Query a single record:

( ) A single record is retrieved.
( ) Pressing the F12 key clears the record and permits entering a second query.
( ) The second query successfully retrieves the desired data.

( ) Query multiple records using wild cards:

( ) Pressing F12 clears the block and makes the block ready for a query.
( ) A query composed of a trailing % wildcard retrieves the desired data.
( ) A query using a prefix % wildcard retrieves the correct data.
( ) A query using both prefix and suffix % wildcards retrieves the correct data.
( ) A query using the underscore (_) position wildcard retrieves the correct data.

( ) Verify that the data queries in the block are ordered logically.

( ) Store a series of records using the F6 [duplicate record] key to carry forward field values from the previously stored record.
Attempting to store the duplicated record without change should result in an error.

Change key fields and store the record. It should store successfully.

Field Prompt: REL
Field Usage: Non Updateable
Field Name: RELATIONSHIP

This data field:
- Provides a default value. To accept the default value, press the ENTER key or TAB key.
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Attempt to change data in the field. An error should result.
   ( ) Use the spacebar to attempt to change data.
   ( ) Use the clear field key (F8) to attempt to change data.

( ) Attempt to delete data in the field. An error should result.
   ( ) Use the spacebar to attempt to delete data.
   ( ) Use the clear field key (F8) to attempt to delete data.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Accept the default.

( ) Modify each default value with a valid alternative.
Modify each default value with an invalid alternative.

Attempt to delete an existing data field value. An error should result when <F10> or <Enter> are pressed.

Use the space bar to attempt to delete the field data.

Use CLEAR field (F8) to attempt to delete the field data.

Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.

Enter a duplicate value. An error should occur.

From LOV, select a value already present in the database. An error should occur.

Attempt to enter an invalid relationship. An error should occur.

Field Prompt: Org Id
Field Usage: Queryable Only
Field Name: IDENT-ORGAN

This field uniquely identifies the data item to the database. An error will occur if you attempt to enter a identification value already present in the database.
The format is: XXX/XXX (alphanumeric).

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

Enter query mode and verify that this field is accessible.

Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.

Enter a duplicate value. An error should occur.

From LOV, select a value already present in the database. An error should occur.
Field Prompt: Title
Field Usage: Queryable Only
Field Name: TITLE

Field Help
Enter a 1-40 title for the data item. The title should be as descriptive as possible. It will be placed in the database in all caps form.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.

Field Test Plan

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.

( ) Only records matching the entered value should be displayed.

( ) Enter a duplicate value. An error should occur.

( ) From LOV, select a value already present in the database. An error should occur.
Application: TLEMIS: Liquid Effluent Monitoring Information System

Transaction: LE2110U5 SAP Definition

-----------------------------
Comment ID: 1086  Priority: LOW  Date: 03-JUN-93
-----------------------------
Status: HANDLED  Date: 08-JUN-93  Class: ...
Type: PROBLEM
Assigned To: TODD ADAMS
Entered By: LORRAINE CAMPBELL
System ID: Oracle ROWID: 0000012D.0018.0009
Last Error: -0
Last Msg: FRM-40350 Query caused no records to be retrieved.
Table: EVENT_METHOD_J
Block: EVLABP
Field: EVLABP.DSP_IDENT_METHO

DESCRIPTION
----------------------------------------
no field help available

CORRECTIVE ACTION
----------------------------------------
08-Jun-93 - Not a problem. Block help adequately describes field.
TRAE 211005: SAP Definition

Status: HANDLED  Date: 08-JUN-93  Class:
Type: PROBLEM
Assigned To: TODD ADAMS
Entered By: LORRAINE CAMPBELL
System ID: Oracle, ROWID:
Last Error: -0
Last Msg: FRM-40350 Query caused no records to be retrieved.
Table: EVENT PERSON
Block: EVEPER
Field: EVEPER.RELATIONSHIP

DESCRIPTION

Help states OSM is a valid relationship, but LOV has HSM.

CORRECTIVE ACTION

08-Jun-93 - Fixed. Changed all references from OSM to HSM.
08-JUN-93

Programmer's Bug Report

Application: TLEMIS  Liquid Effluent Monitoring Information System

Transaction: LE2110U5  SAP Definition

-----------------------------------
Comment ID: 1090  Priority: LOW  Date: 03-JUN-93
-----------------------------------

Status: HANDLED  Date: 08-JUN-93  Class:
Type: PROBLEM:
Assigned To: TODD ADAMS
Entered By: LORRAINE CAMPBELL
System ID: 920000192711  Oracle ROWID: 0000013E.0008.0009
Last Error: -0
Last Msg: FRM-40102  Record must be entered or deleted first.
Table: EVENT_ORGAN_J
Block: EVEORG
Field: EVEORG.DSP_IDENT_ORGAN

DESCRIPTION

NO FIELD HELP AVAILABLE.

CORRECTIVE ACTION

08-Jun-93 - Not a problem. Block help adequately describes field.

Signature: [Signature]

Page 1 of 1
08-JUN-93

Programmer’s Bug Report

Application: TLEMIS  Liquid Effluent Monitoring Information System
Transaction: LE2110U5 SAP Definition

Comment ID: 1091  Priority: LOW  Date: 03-JUN-93

Status: HANDLED  Date: 08-JUN-93  Class:
Type: PROBLEM
Assigned To: TODD ADAMS
Entered By: LORRAINE CAMPBELL
System ID: 92500019271  Oracle ROWID: 0000013E.0008.0009
Last Error: -0
Last Msg: FRM-40353 'Query cancelled.'
Table: EVENT_ORGAN
Block: EVEORG
Field: EVEORG.DSB_IDENT_ORGAN

DESCRIPTION

Cannot query from ID field

CORRECTIVE ACTION

08-Jun-93: Not a problem. Shouldn’t be able to query. Only one organization allowed per SAP.
<table>
<thead>
<tr>
<th>Comment ID</th>
<th>Status</th>
<th>Date</th>
<th>Class</th>
<th>Type</th>
<th>Assigned To</th>
<th>Entered By</th>
<th>System ID</th>
<th>Oracle ROWID:</th>
<th>Last Error</th>
<th>Last Msg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1106</td>
<td>ASSIGNED</td>
<td>08-JUN-93</td>
<td></td>
<td>PROBLEM</td>
<td>TODD ADAMS</td>
<td>TODD ADAMS</td>
<td></td>
<td></td>
<td>-0</td>
<td>-0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Oracle ROWID:</td>
<td>0000012D.0016.0009</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DESCRIPTION**

Loraine tried to enter this bug, but it didn't take. When she does a `<F6>` she expected a duplicate record error, but received a system error.

**CORRECTIVE ACTION**

08-Jun-93 - Corrected error message from 'system error' to 'duplicate value'.

98
**Transaction: LE2110U5 SAP Definition**

<table>
<thead>
<tr>
<th>Comment ID :</th>
<th>1107</th>
<th>Priority:</th>
<th>LOW</th>
<th>Date: 08-JUN-93</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status      :</td>
<td>ASSIGNED</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type        :</td>
<td>PROBLEM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assigned To :</td>
<td>TODD ADAMS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entered By  :</td>
<td>TODD ADAMS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System ID   :</td>
<td>EVENT LOCATION J</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oracle ROWID:</td>
<td>000000109.0023.0009</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Last Error  :</td>
<td>-0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Last Msg    :</td>
<td>FRM-40350: Query caused no records to be retrieved.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Table       :</td>
<td>EVENT LOCATION J</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block       :</td>
<td>EVELOC2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field       :</td>
<td>EVELOC2.DSP_IDENT LOCA_</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DESCRIPTION**

Lorraine tried to enter this bug but it didn't take — When pressing <F6> to duplicate locations, she expected 'duplicate record' error but instead received 'system error' message.

**CORRECTIVE ACTION**

08-Jun-93 - Fixed. Corrected the msg_query number from 'system error' to 'duplicate value' message.
TRANSACTION: LE211005 SAP Definition

APPLICATION: TLEMIS  Liquid Effluent Monitoring Information System

Transaction: LE211005 SAP Definition

Transaction: LE211005 SAP Definition

Date: 08-JUN-93

Class: PROGRAMMER'S BUG REPORT

Status: ASSIGNED

Type: PROBLEM

Assigned To: TODD ADAMS

Entered By: TODD ADAMS

System ID: 92000019271

Oracle ROWID: 0000013E.0008.0009

Last Error:

Last Msg: FRM-40400  Transaction complete -- 2 records posted an

Table: EVENT ORGAN_J

Block: EVEORG

Field: EVEORG_DSP_IDENT_ORGAN

DESCRIPTION

Lorraine tried to enter this bug but it didn't take - System let her
enter more than one organization. It should only let her enter one.

CORRECTIVE ACTION

08-Jun-93 - Fixed. Corrected error message from 'system error' to
'duplicate value'.

[Signature]
1.3 LE2120U1: SAMPLE AUTHORIZATION FORM

LEMS Module Test Checklist Report

Name: SAMPLE AUTHORIZATION FORM
Short Name: LE2120U1
Purpose: Sample Authorization Form (SAF)
Initial Test Date: 4/26/92
Verification Date: 5/13/93

Module Description

The transaction maintains a SAF.

The SAF is the authorization to take a sample. As such it is based on a SAF and is subordinate to a SAF.

Text may be associated with a SAF.

Multiple SAFs may exist for a SAF but only one may be active at a time. It will be normal to schedule future sampling as far as two or three years in the future.

Since a SAF may change between the time a sampling is scheduled and the time it occurs, scheduling a sampling will not create an entire SAF but only an abbreviated subset. (This will be a separate screen.)

At the point where a SAF is generated, it will inherit the previously scheduled item in the database. (The user will have looked at it as a sampling schedule not as a SAF but under the covers we will have created a SAF.)

OSM will enter their SAF identifier and will complete the building of the SAF, which will include:
Module Description

1) Pulling the methods list from the SAP. All methods will be copied directly from the SAP (another screen will be defined to allow a subset of the methods list to be pulled).

2) The stream locations will be copied from the SAP. Only the location title will be displayed.

3) The customer person information will be copied from the SAP as a default; it may be overridden by the operator. Customer person information includes: Customer name, phone, MSIN, and org code. The name of the customer organization is extracted from the organization data and displayed. The date requested is also displayed.

The following SAP specific elements will be included on the screen:

a) Sample type (default to 'P' (protocol))
b) Priority (default 'T' (TPA Ranking))
c) Protocol (default 'R' (RCRA))
d) Other protocols — literal value

e) Sample Matrix (default 'WA' (water))

4) Organization information may be entered: Use LOV link to organization list. Multiple organizations may be associated with specific relationship codes.

5) A series of sample requests will be defined. The laboratory and purpose will be defined for each sample request. A sample request identifier (a sequence number) will be generated.

6) For each sample request a set of samples will be defined, one for each sampling location identified in the SAP. A sample number will be generated for each sample. This number will be changed to the HSIS sample number when field data is entered. The sample data line will include the purpose code and location title.

7) For each sample request, a series of method line items will be generated. Each line item will include the method, preservative, bottle quantity/type/size, extraction time in days, and holding time in days. The operator will have the option to combine methods into a bottle series if desired. [[Desirably, be able to automatically identify these possible combinations and provide the operator with a default that may be changed.]]

8) A SAF will have two distinct stages, development and approved. A flag will be kept to distinguish the stage. Once approved, a SAF cannot be modified unless the revision level is changed. This screen, therefore, will have to check conditions. If the SAF is approved, changes will not be allowed unless the revision level is also changed.

The subject of a sampling activity defaults to liquid effluent (LEF).
Module Description

Round number remains in the database for HEIS compatibility but is not displayed or updated.

Module Help

This screen is used to enter the "Sample Authorization Form" (SAF) information. A SAF is the authorization to take samples. It is subordinate to a SAP and must be related to a SAF. A SAF may only be created if a sample has been previously scheduled.

Summary of procedures specified in this help:
I. SAF Creation
II. Linking Request Lines
III. Removing Locations from a Sample Request
IV. Adding duplicate samples at the same location
V. Sample Request Duplication

1. To create a SAF:

   1. Select the Sample Schedule for which to create the SAF:
      a) Press <PageDown> to enter query mode. (If "Enter a query" appears at the bottom of the screen, F12 does not need to be pressed)
      b) A Sample Schedule may be selected by any of the four fields: SAP ID, SAF Title, Schedule ID, and Scheduled Date. To select by one of these fields, enter the desired value (ie SAP ID) into the appropriate field.
      c) If multiple records match the entered value (ie multiple scheduled samples for a SAF) they will be displayed in date order with the earliest one first. Use the arrow keys to display the scheduled sample that this SAF will be for.

2. Enter the "Sample Authorization" information:
   a) Press <PageDown> to enter the "Sample Authorization" block.
   b) Enter the SAF ID. If the SAF ID is not known, or should be defaulted to the value of the schedule ID, type '.' and press <Enter>. This will copy the schedule ID into the SAF ID.
   c) Enter the Date Requested in DD/MM/YY format. This is the date that Mobil Sample Labs is being requested to actually perform the sampling activity.
   d) Enter "Priority", "Sample Type", "Protocol", and "Matrix". See the field help for these fields for a description of each.
   e) If needed, text may be entered for this SAF by pressing <F7>.

3. Enter/Update the Persons Associated with the SAF:
   a) Press <PageDown> to enter the "Persons..." block. If the customer name, and/or the HASS coordinator were entered when this schedule was entered, the information will be displayed. If the information is correct, skip over this block by pressing <PageDown> and continue this procedure with step 4.
If this information needs to be entered or modified continue
this procedure with the next step.

b) If a customer contact, or HASM Coordinator has to be entered,
use the arrow keys to move the cursor to an empty record.
If one of these records needs to be modified, move the cursor
to the record to be modified.

c) If this is a new entry, enter "CUS" (for customer) or "HAS" (for
HASM Coordinator) into the relationship field. LOV is available.
Only one customer and one HASM Coordinator may be defined for
each SAF. "HAS" has been defined as the default for this field.
Press <Enter> to move to the next field.

f) Enter the name of the person and press <Enter>.

g) Enter the phone number and press <Enter>.

h) Enter the MSIN and press <Enter>.

i) Press <F10> to save this information in the database.

4. Enter Customer Organization:
   a) Press <PageDown> to enter the "Customer Organization" block.
      If a customer organization was entered when the schedule
      was created, there will already be information in this block.
   
b) Enter the org code of the customer organization or use LOV to
      see a list of organizations. Only one customer organization
      may be defined for a SAF.

6. Enter the sample requests for a SAF:
   a) Press <PageDown> to move into the "Sample Requested" block.
   b) Enter the unique sample identifier. If this is left blank
      a sequence number for this SAF will be automatically generated.
   c) Enter the purpose for this sample. Example purposes are:
      PRIMARY, SPLIT, BLANK etc. LOV is available for this field.
      Press <Enter> to move to the next field.
   d) Enter the ID of the lab that will perform the testing on this
      sample. (ie WESTON, DATACH, etc). LOV is available for this
      field.
   e) If more samples are to be entered, press the down arrow key or
      the <Insert> key to move to an empty record and repeat steps
      6b) through 6d).
   
   g) Enter the "Sample Request Line Items" for every sample (as
detailed in section 7).
   
   i) If desired, textual comments may be added to each sample request.
      by pressing <F7>.

7. Enter Sample Request Line Item:
   a) Press <PageDown> to move to the "Sample Analysis Request Line
      Item" block. When the sample was created, sample request
      line item records were created for each method selected in
      the SAF that is valid for the selected laboratory. This
      list may be modified to meet the requirements of this SAF.
      If new requests need to be added, use the following procedure.
      To combine methods into the same bottles, use the "Linking"
j) Repeat steps 7b)–7i) for every method to be performed on this sample.

II. Linking Request Lines:

When more than one method is to be performed using the same bottle or set of bottles, the request lines should be merged using one of the following procedures:

Initial Entry Procedure:

If it is known that a new entry (new record) will be using the same set of bottles, the following procedure may be used:

1. Enter the same "Req Num" as the other request line(s) that will use the same set of bottles.
2. Select "Method" as above.
3. Make sure the bottle qty, type, size, and preservative match the other records with the same "Req Num". If they do not match, the system will not save the record to the database. Instead an error message will be displayed.
4. Press <F10> to commit the change to the database.
III. Removing Locations from a Sample Request:

By default, all sampling locations specified in the SAP will be specified for each sampling request. If a particular sample request will not apply to all of the sampling locations, the following procedure may be followed to remove locations:

1. Make sure the "Sample Requested" block is displayed.
2. Move the cursor to the desired sample request.
3. Press <PageDown> twice to move to the "Samples at each Location" block.
4. Use the cursor keys to move the cursor to the location to be removed. If there is a "Y" in the "Text?" field, then <F7> may be used to display a complete description of the location.
5. Press <Delete> to remove this location from this sample request.
6. Press <F10> to commit the change.

IV. Adding duplicate samples at the same location:

If it is known in advance that a sample request will have a duplicate sample set taken at a specific location, the following procedure may be used to indicate this at the time of the SAP definition:

1. Make sure the "Sample Requested" block is displayed.
2. Move the cursor to the desired sample request.
3. Press <PageDown> twice to move to the "Samples at each Location" block.
4. Press <Insert> to create a new sample record.
5. Enter a temporary sample ID. The system uses the SAP number followed by a sequence number.
6. Enter the purpose of the sample (i.e., DP for Duplicate).
7. With the cursor in the "Location Description" field, press <F2> to get a list of sampling locations for this SAP.
8. Use the arrow keys to move the cursor to the desired location and press <Enter> to select it.
9. Press <F10> to commit the new sample.

V. Sample Request Duplication:

If a complete sample request is to be duplicated, (i.e., for a laboratory split) perform the following procedure:

1. Make sure the "Sample Requested" block is displayed.
2. Move the cursor to the sample request to copy.
3. Press <Insert> to open a new sample request record.
4. Press <F6> to duplicate the sample request record listed above. This will ALWAYS duplicate the record immediately above the new record.
UNIT TEST CHECKLIST

Module Function Key

- Show Version: Shift-F10
- Comment/Bug: Shift-F3
- Fast Access: F5
- Back: F4 or Esc
- Main Menu: Shift-F4
- Key Template: Ctrl-F1
- Context Print: F11
- Query Print: Ctrl-F11
- Oracle Print: Shift-F11

Block Title: Sample Schedule
Block Table: SAMPLE_SCHEDULE

- Help: F1
- OnLine Doc: F2
- Related Data: F3
- Spec Func 1: Shift-F5
- Home/End: Home/End
- Scroll Up/Down: Shift-Up/Down
- Erv/Nxt Rec: Up/Down
- Clear Field: F8
- Clear Form: Shift-F8
- Enter Query: F12
- Correct Query Fields?: Ctrl-F12
- Execute Qry: Shift-F12
- Count Query: Ctrl-F12
- UpperCase and LOVs?: Ctrl-F12
- Correct Query Order?: Ctrl-F12

Report Print: No Worthy

No Text For This Data

No Related Data For This Record
<table>
<thead>
<tr>
<th>Block Title: Sample Analysis Request Line Item</th>
<th>Block Table: SAMPLE ANALYSIS_REQ LINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help : F1</td>
<td>( ) Key Help : Shift-F1</td>
</tr>
<tr>
<td>Online Doc : F2</td>
<td>( ) Dis Journal : Shift-F2</td>
</tr>
<tr>
<td>Related Data : F3</td>
<td>( ) Edit Text : F7</td>
</tr>
<tr>
<td>Spec Func 1 : Shift-F5</td>
<td>( ) Spec Func 2 : Ctrl-F5</td>
</tr>
<tr>
<td>Home/End : Home/End</td>
<td>( ) Prv/Nxt Block : PgDn/PgUp</td>
</tr>
<tr>
<td>Scroll Up/Dn : Shift-Up/Dn</td>
<td>( ) Prv/Nxt Field : Tab/Sh-Tb</td>
</tr>
<tr>
<td>Prv/Nxt Rec : Up/Down</td>
<td>( ) Commit Form : F10</td>
</tr>
<tr>
<td>( ) Clear Field : F8</td>
<td>( ) Clear Record : Shift-F8</td>
</tr>
<tr>
<td>( ) Clear Form : Shift-F8</td>
<td>( ) Exit System : Ctrl-F4</td>
</tr>
<tr>
<td>( ) Enter Query : F12</td>
<td>( ) Count Query : Ctrl-F12</td>
</tr>
<tr>
<td>( ) Correct Query Fields? : ( ) Uppercase and LOVs?</td>
<td></td>
</tr>
<tr>
<td>( ) Execute Qry : Shift-F12</td>
<td>( ) Correct Query Order?</td>
</tr>
</tbody>
</table>

( ) Insert Rec : Insert |
( ) Add record at end |
( ) List of Values OK? |
( ) List of Values OK? |
( ) Duplicate Fld : Shift-F6 |
( ) Duplicate checks OK? |
( ) Mandatory checks OK? |
( ) Optional fields marked? |
( ) Correct fields uppercase |

( ) Delete Record : Delete

<table>
<thead>
<tr>
<th>() Block Title: Samples at each Location</th>
<th>Block Table: SAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help : F1</td>
<td>( ) Key Help : Shift-F1</td>
</tr>
<tr>
<td>Online Doc : F2</td>
<td>( ) Dis Journal : Shift-F2</td>
</tr>
<tr>
<td>Related Data : F3</td>
<td>( ) Edit Text : F7</td>
</tr>
<tr>
<td>Spec Func 1 : Shift-F5</td>
<td>( ) Spec Func 2 : Ctrl-F5</td>
</tr>
<tr>
<td>Home/End : Home/End</td>
<td>( ) Prv/Nxt Block : PgDn/PgUp</td>
</tr>
<tr>
<td>Scroll Up/Dn : Shift-Up/Dn</td>
<td>( ) Prv/Nxt Field : Tab/Sh-Tb</td>
</tr>
<tr>
<td>Prv/Nxt Rec : Up/Down</td>
<td>( ) Commit Form : F10</td>
</tr>
<tr>
<td>( ) Clear Field : F8</td>
<td>( ) Clear Record : Shift-F8</td>
</tr>
<tr>
<td>( ) Clear Form : Shift-F8</td>
<td>( ) Exit System : Ctrl-F4</td>
</tr>
<tr>
<td>( ) Enter Query : F12</td>
<td>( ) Count Query : Ctrl-F12</td>
</tr>
<tr>
<td>( ) Correct Query Fields? : ( ) Uppercase and LOVs?</td>
<td></td>
</tr>
<tr>
<td>( ) Execute Qry : Shift-F12</td>
<td>( ) Correct Query Order?</td>
</tr>
</tbody>
</table>

( ) Insert Rec : Insert |
( ) Add record at end |
( ) List of Values OK? |
( ) List of Values OK? |
( ) Duplicate Fld : Shift-F6 |
( ) Duplicate checks OK? |
( ) Mandatory checks OK? |
( ) Optional fields marked? |
( ) Correct fields uppercase |

( ) Delete Record : Delete
TEST PLAN

Testing of the transaction is performed at four levels:

1. Developer testing.
2. Secondary testing.
3. End user testing.
4. Production release & verification.

As each applicable section of this test plan is completed, the designated individual responsible for the section will sign the plan in the appropriate places. Each checklist item will be completed. The status of the transaction will be updated in the data dictionary. The transaction progresses through the development and test steps.

Developer Testing

As each individual transaction is generated, the developer performs tests against the transaction to ensure that it meets specifications and works properly. Upon successful completion of this testing, the transaction is made available for secondary testing.

Test status conditions are:

1. Transaction under development, untested.
2. Transaction moved to development directory (addmod).
3. Development complete, initial unit testing in progress.
4. Help added.
5. Unit Test checklist completed.
6. Specific test plan added (if needed).
7. Any bugs found in Unit test fixed.
9. Initial unit testing complete. Developer ______________ Date Complete __________

Secondary Testing

Secondary testing is performed by a person external to the development team. Tests are performed using a standardized test checklist. Initial testing is performed to ensure that the transaction meets the functional requirements of the transaction and satisfies the test plan narrative that follows.

1. Secondary testing in progress.
2. Secondary testing complete, problems found. Resolution in progress.
3. Unable to resolve problem at this time.
4. Problem resolution complete.
WHC-SD-WM-TP-169 REV 0

When problems are found:

1. The tester passes the checklist to the project manager for review and action.
2. The project manager assigns the checklist to the developer of the transaction for correction of the problems.
3. The developer corrects the described problems, records the corrective actions taken and the number of hours of corrective effort used, tests the transaction for correct operation, and returns the checklist to the project manager.
4. The project manager returns the checklist to the tester for retesting.

The above sequence of events repeats until the tester signs off the transaction as passing the test requirements.

End User Testing:

The transaction is tested by end users for a predetermined time period. This testing is done in the development environment. If no problems are encountered, or all problems are resolved at the end of this time period, the module is ready for Project Manager review.

( ) 9 – End User testing in progress.
( ) 10 – Problem found, resolution in progress.
( ) 11 – Problem resolution complete.
   Developer ___________________ Date Complete __________
( ) 12 – Resolution verified.
   Tester ___________________ Date Complete __________

Production Status

( ) 13 – Ready for Project Manager/System Architect review.
   The Project Manager or System Architect reviews all test results and determines that the transaction has completed testing.
   Architect/Manager ___________________ Date Complete __________

( ) 14 – The transaction is ready to be placed into production.
   ( ) Software files moved to production directory.
   ( ) Transaction added to production menu.
   ( ) Transaction access given to production roles.
   ( ) Validation test performed in production.
   ( ) Production documentation up to date.

   ( ) 15 – The transaction has been put into production

   By ___________________ Date Done __________

12
Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

- Purpose of the block
- Options available in the block
- The relationship of the block to the transaction or to the principal parent block of the transaction
- Navigation to other blocks of the transaction
- Where block synchronization is used, ensure that the block data is in sync with the parent block.

Query a single record:

- A single record is retrieved.
- Pressing the F12 key clears the record and permits entering a second query.
- The second query successfully retrieves the desired data.

Query multiple records using wild cards:
Field Name: IDENT_SAP

Field Prompt:  SAP ID
Field Usage: Non Updateable

Field Help:
This field uniquely identifies the responsible SAP for this sample schedule.

Field Test Plan:

(✓) Enter query mode and verify that this field is accessible.
(✓) Enter query mode and enter a valid value in this field.
   (✓) Only records matching the entered value should be displayed.

Field Prompt:  Title
Field Usage: Non Updateable
Field Name: TITLE_SAP

Field Help:
This is a 1-40 character descriptive title for the SAP.

Field Test Plan:

(✓) Enter query mode and verify that this field is accessible.
(✓) Enter query mode and enter a valid value in this field.
   (✓) Only records matching the entered value should be displayed.
Field Prompt: Scheduled Date
Field Usage: Queryable Only
Field Name: DATE_SCHEDULED

Field Help

This is the date that this sampling activity is scheduled to take place. The sampling activity may involve multiple samples taken at multiple sampling locations within a stream.

This data field:
- Must contain a valid value. A blank is not allowed.
- Date data must be entered in the format ‘mm/dd/yy’
  where:
  mm  = the month of the year; months prior to 10 should have a leading zero, e.g., May should be 05
  dd  = the day of the month; days prior to 10 should have a leading zero, e.g., May 1 should be shown as 01
  yy  = the last two digits of the calendar year, e.g., 1992 is entered as 92.

Field Test Plan

1. Enter query mode and verify that this field is accessible.
2. Enter query mode and enter a valid value in this field.
3. Only records matching the entered value should be displayed.
Block Title: Sample Authorization
Block Table: SAMPLE AUTHORIZATION
Block Usage: Full Function

Block Help

This block contains the header information for the SAF (Sample Authorization Form). This includes the SAF ID, Date the sampling activity has been requested, and a few descriptive fields about this sampling activity. The detailed information for this SAF will be entered in subsequent blocks.

Block Test Plan

❖ Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

❖) Block help describes:
   ❖) Purpose of the block.
   ❖) Options available in the block.
   ❖) The relationship of the block to the transaction or to the principal parent block of the transaction.
   ❖) Navigation to other blocks of the transaction.

❖ Where block synchronization is used, ensure that the block data is in sync with the parent block.

❖ Query a single record:
   ❖) A single record is retrieved.
   ❖) Pressing the F12 key clears the record and permits entering a second query.
   ❖) The second query successfully retrieves the desired data.

❖ Query multiple records using wild cards:
   ❖) Pressing F12 clears the block and makes the block ready for a query.
   ❖) A query composed of a trailing % wildcard retrieves the desired data.
   ❖) A query using a prefix % wildcard retrieves the correct data.
   ❖) A query using the underscore (_) position wildcard retrieves the correct data.
   ❖) Verify that the data queries in the block are ordered logically.
1. Store a series of records using the F6 [duplicate record] key to carry forward field values from the previously stored record.

2. Attempting to store the duplicated record without change should result in an error.

3. Change key fields and store the record. It should store successfully.

4. Update a record:

   a. The change count should increment.
   b. The date updated should become the current date.
   c. An error should occur if the operator identifier does not match the data owner identifier.

5. Delete a record from the block:

   a. If the record has dependent records, the delete should fail unless the help text indicates that a cascading delete is permitted.
   b. Use the clear rcd key [CTRL/F8].
   c. For a single record block, the block should clear.
   d. For a multi-record block, the record pointed to by the cursor should clear.

6. Use the delete key:

   a. For a single record block, the block should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should appear in the block.
   b. For a multiple record block, the entry should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should move up to fill the cleared space.

7. Verify that multiple SAFs may not be created for a schedule:

   a. Create record should not create a new record.
   b. Delete record should not delete the record.
   c. Clear record should not work.
   d. Enter query should not work.
   e. Count query should not work.
   f. The Down arrow key should not open a new record.

8. Verify that multiple Organizations may not be added:

   a. Create record should not create a new record.
   b. Delete record should not delete the record.
   c. Clear record should not work.
   d. Enter query should not work.
   e. Count query should not work.
   f. The Down arrow key should not open a new record.

9. Verify the entering "  " into the SAF ID field defaults the SAF ID correctly.

10. Verify correct navigation/mandatory field when protocol is "OTHER"
Field Prompt: SAF ID
Field Usage: Updateable
Field Name: IDENT_SAF

Field Help

The SAF ID should uniquely identify the SAF. If ‘.’ is entered then the SAF ID will be defaulted to the same value as the Schedule ID.

This data field:
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.
- May contain any character combination.

Field Test Plan

(*) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

(*) Enter data beyond the length of the field:
- If autoskip is in effect, cursor will skip to the next field.
- If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

(*) Display column help. Verify that the narrative adequately describes the column’s purpose and functions in end-user terms.

(*) Change the field in an existing record. Verify that the change occurred by displaying the record on the ‘screen before and after the changes were made.

(*) Change the field where a range of valid values exists:
- Value below valid range should display message COM00101 or COM00103 (if no LOV).
- Value above valid range should display message COM00101 or
COM00103 (if no LOV).

( ) Minimum value within the range should be accepted.
( ) Maximum value within the range should be accepted.
( ) Random value within the range should be accepted.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.

( ) Attempt to delete an existing data field value. An error should
result when <F10> or <Enter> are pressed.
( ) Use the space bar to attempt to delete the field data.
( ) Use 'clear field' (F8) to attempt to delete the field data.

( ) Enter data into the field, backspace the data out of the field and
attempt to TAB to the next field. An error should occur.

( ) Enter a duplicate value. An error should occur.
( ) From LOV, select a value already present in the database. An
error should occur.
Field Prompt: Date Requested
Field Usage: Updateable
Field Name: DATE_REQUESTED

Field Help:
This is the date that the mobile sample labs is being requested to
actually perform this sampling activity.

This data field:
- Date data must be entered in the format mm/dd/yy
  where:
  mm = the numeric month of the year. Months prior to 10
  should have a leading '0', e.g. January should be 01
  dd = the numeric day of the month. Days prior to 10 should
      have a leading '0', e.g. January 1 = 01/01
  yy = the last two digits of the calendar year, e.g., 1992 is
      entered as 92.

Field Test Plan

1. Verify that the field only allows valid dates.
2. Display column help. Verify that the narrative adequately
   describes the column's purpose and functions in end-user terms.
3. Change the field in an existing record. Verify that the change
   occurred by displaying the record on the screen before and after
   the changes were made.
4. Change the field, committing after each change.
5. Change the field where a range of valid values exists:
   - Value below valid range should display message COM0101 or
     COM0103 (if no LOV).
   - Value above valid range should display message COM0101 or
     COM0103 (if no LOV).
   - Minimum value within the range should be accepted.
   - Maximum value within the range should be accepted.
   - Random value within the range should be accepted.
6. Enter query mode and verify that this field is accessible.
7. Enter query mode and enter a valid value in this field.
   - Only records matching the entered value should be displayed.
8. Skip the field using the TAB key.
9. Enter data into the field, backspace the data out of the field
    and TAB to the next field. The database should contain a null
    value.
( ) Delete an existing value. The field should be cleared and stored.

( ) Delete the value using the space bar.

( ) Delete the value using the clear field key (F8)
Field Prompt: Priority  
Field Usage: Updateable  
Field Name: PRIORITY  

Field Help:  
If a SAF is designated as "PRIORITY", the samples will receive  
special handling to process the samples in a more timely fashion.  

This data field:  
- Provides a default value. To accept the default value, press the  
  ENTER key or TAB key.  
- Must contain a valid value. A blank is not allowed.  
- All input is converted to upper case.  

Field Test Plan:  

() Verify that the field accepts character or numeric data within  
the limits imposed by validation criteria.  

() Enter data beyond the length of the field:  
() If autoskip is in effect, cursor will skip to the next field.  
() If no autoskip, cursor will remain at the end of the field and  
  overlay characters, leaving the last character keyed in the  
  last position of the field.  

() Display column help. Verify that the narrative adequately  
describes the column's purpose and functions in end-user terms.  

() Change the field in an existing record. Verify that the change  
ocurred by displaying the record on the screen before and after  
the changes were made.  
() Change the field, committing after each change.  
() Change the field where a range of valid values exists:  
  () Value below valid range should display message COM00101 or  
    COM0103 (if no LOV).  
  () Value above valid range should display message COM00101 or  
    COM0103 (if no LOV).  
  () Minimum value within the range should be accepted.  
  () Maximum value within the range should be accepted.  
  () Random value within the range should be accepted.  

() Enter query mode and verify that this field is accessible.  

() Enter query mode and enter a valid value in this field.  
() Only records matching the entered value should be displayed.  

() Accept the default.  

() Modify each default value with a valid alternative.
Modify each default value with an invalid alternative.

Skip the field using the TAB key. Error received!

Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

Delete an existing value: The field should be cleared and stored.

Delete the value using the space bar.

Delete the value using the clear field key (F8).

Test LOV:

Select the first entry in the LOV.

Select the last entry in the LOV.

Use the FIND option and select an entry.

Field Prompt:  .....
Field Usage: Queryable Only
Field Name: DESCRIPTION

This is a brief description of the generic code.

Field Test Plan:

Enter query mode and verify that this field is accessible. No

Enter query mode and enter a valid value in this field. Only records matching the entered value should be displayed.
Field Prompt: Sample Type
Field Usage: Updateable
Field Name: TYPE_SAMP

This field determines what type of sampling activity this SAF is for. Examples are: Automated, Routine, Protocol. See LOV for a complete list.

This data field:
- Provides a default value. To accept the default value, press the ENTER key or TAB key.
- All input is converted to upper case.

Field Test Plan:

(✓) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

(✓) Enter data beyond the length of the field:
   (✓) If autoskip is in effect, cursor will skip to the next field.
   (✓) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

(✓) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

(✓) Change the field in an existing record; Verify that the change occurred by displaying the record on the screen before and after the changes were made.
(✓) Change the field, committing after each change.
(✓) Change the field where a range of valid values exists:
   (✓) Value below valid range should display message CM00101 or CM00103 (if no LOV).
   (✓) Value above valid range should display message CM00101 or CM00103 (if no LOV).
   (✓) Minimum value within the range should be accepted.
   (✓) Maximum value within the range should be accepted.
   (✓) Random value within the range should be accepted.

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.
   (✓) Only records matching the entered value should be displayed.

(✓) Accept the default.

(✓) Modify each default value with a valid alternative.
Modify each default value with an invalid alternative.

Skip the field using the TAB key.

Enter data into the field, backspace the data out of the field, and TAB to the next field. The database should contain a null value.

Delete an existing value; the field should be cleared and stored:

Delete the value using the 'space bar'.

Delete the value using the clear field key (F8).

Test LOV:

Select the first entry in the LOV.

Select the last entry in the LOV.

Use the FIND option and select an entry.

Field Prompt: Field Usage: Queryable only Field Name: DESCRIPTION

Field Help

This is a brief description of the generic code:

Field Test Plan

Enter query mode and verify that this field is accessible.

Enter query mode and enter a valid value in this field.

Only records matching the entered value should be displayed.
Field Name: TYPE_PROTOCOL

Field Help:

This field indicates what protocol will be used for this sample.
(i.e. CERCLA, RCRA). If OTHER is selected as the protocol, the name
of the protocol MUST be specified in the next field.

This data field:
- Provides a default value. To accept the default value, press the
  ENTER key or TAB key.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan:

✓ Verify that the field accepts character or numeric data within
the limits imposed by validation criteria.

✓ Enter data beyond the length of the field:
  ( ) If autoskip is in effect, cursor will skip to the next field.
  ( ) If no autoskip, cursor will remain at the end of the field and
      overlay characters, leaving the last character keyed in the
      last position of the field.

✓ Display column help. Verify that the narrative adequately
  describes the column's purpose and functions in end-user terms.

✓ Change the field in an existing record. Verify that the change
  occurred by displaying the record on the screen before and after
  the changes were made.
  ( ) Change the field, committing after each change.
  ( ) Change the field where a range of valid values exists:
      ( ) Value below valid range should display message COM00101 or
        COM00103 (if no LOV).
      ( ) Value above valid range should display message COM00101 or
        COM00103 (if no LOV).
      ( ) Minimum value within the range should be accepted.
      ( ) Maximum value within the range should be accepted.
      ( ) Random value within the range should be accepted.

✓ Enter query mode and verify that this field is accessible.

✓ Enter query mode and enter a valid value in this field.
  ( ) Only records matching the entered value should be displayed.

✓ Accept the default.
(4) Modify each default value with a valid alternative.
(1) Modify each default value with an invalid alternative.
(2) Skip the field using the TAB key.
(3) Enter data into the field, backspace the data out of the field, and TAB to the next field. The database should contain a null value.
(4) Delete an existing value. The field should be cleared and stored:
   (a) Delete the value using the space bar.
   (b) Delete the value using the clear field key (F8).
(5) Test LOV:
   (a) Select the first entry in the LOV.
   (b) Select the last entry in the LOV.
   (c) Use the FIND option and select an entry.

Field Prompt:
Field Usage: Queryable Only
Field Name: DESCRIPTION

Field Help
This is a brief description of the generic code.

Field Test Plan

( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.
Field Prompt: If (OTHER) Specify
Field Usage: Updateable
Field Name: DESCRIPTOR

Field Help:
This is the name of the protocol if OTHER was entered in the protocol field. It is mandatory when OTHER has been entered, otherwise it will be empty.

Field data:
- May contain any character combination.
- All input is converted to upper case.

Field Test Plan

- Verify that the field accepts character or numeric data within the limits imposed by validation criteria.
- Enter data beyond the length of the field:
  - If autoskip is in effect, cursor will skip to the next field.
  - If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.
- Display column help. Verify that the narrative adequately describes the column’s purpose and functions in end-user terms.
- Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
- Change the field, committing after each change.
- Change the field where a range of valid values exists:
  - Value below valid range should display message COM00101 or COM00103 (if no LOV).
  - Value above valid range should display message COM00101 or COM00103 (if no LOV).
  - Minimum value within the range should be accepted.
  - Maximum value within the range should be accepted.
  - Random value within the range should be accepted.
- Enter query mode and verify that this field is accessible.
- Enter query mode and enter a valid value in this field.
  - Only records matching the entered value should be displayed.
- Skip the field using the TAB key.
- Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null
value.

( ) Delete an existing value. The field should be cleared and stored:

( ) Delete the value using the space bar.

( ) Delete the value using the 'clear field' key (F8).

Blank not allowed. Checklist wrong.
Field Prompt: Sample Matrix
Field Usage: Updateable
Field Name: TYPE_SAMPLE_MATRIX

This field specifies the type of material the sample is. Examples are: Water, Sludge, Soil/Sediment. For LEMIS this will usually be water, so this is the default.

This data field:
- All input is converted to upper case.
- Provides a default value. To accept the default value press the ENTER or TAB key.
- Must contain a valid value. Blank is not allowed.

Field Test Plan:

(✓) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

(✓) Enter data beyond the length of the field.
   (✓) If autoskip is in effect, cursor will skip to the next field.
   (✓) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

(✓) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

(✓) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
   (✓) Change the field, committing after each change.
   (✓) Change the field where a range of valid values exists.
      (✓) Value below valid range should display message COM00101 or COM00103 (if no LOV).
      (✓) Value above valid range should display message COM00101 or COM00103 (if no LOV).
      (✓) Minimum value within the range should be accepted.
      (✓) Maximum value within the range should be accepted.
      (✓) Random value within the range should be accepted.

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.
   (✓) Only records matching the entered value should be displayed.

(✓) Accept the default.
Modify each default value with a valid alternative.

Modify each default value with an invalid alternative.

Skip the field using the TAB key.

Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

Delete an existing value. The field should be cleared and stored:

- Delete the value using the space bar.
- Delete the value using the clear field key (F8).

Test LOV:

- Select the first entry in the LOV.
- Select the last entry in the LOV.
- Use the FIND option and select an entry.

Field Prompt:
- Field Usage: Queryable Only
- Field Name: DESCRIPTION

Field Help:

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan:

- Enter query mode and verify that this field is accessible.
- Enter query mode and enter a valid value in this field.
  Only records matching the entered value should be displayed.
Field Prompt: Text?
Field Usage: Queryable Only.
Field Name: FLAG_TEXT

Field Help:
This field is a flag that identifies the presence of additional textual information about the data item. If "N" is displayed, no text is currently present. If "Y" is displayed, text of one or more types is present. To enter or display text, press F7. A popup screen will display the default text type for the data item. If this default text type is the one you want, you may either read or add text. If you want to use another available text type for the data item, press LOV (F9) to display and select the desired text type. Once you have entered any text into the database, the indicator flag for the data item will be set to "Y".

This data field:
- Provides a default value; To accept the default value, press the ENTER key or TAB key.
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.

( ) Only records matching the entered value should be displayed.

Test LOV:
( ) Select the first entry in the LOV.
( ) Select the last entry in the LOV.
( ) Use the FIND option and select an entry.

( ) Press the TEXT key (F7). The text popup should be displayed.

( ) With the cursor at the text type, press LOV (F9). Where available, a list of other text types available for the entry will be displayed. Select one text type for testing.

( ) Press the ENTER key to move the cursor to the text block.

( ) Enter two lines of text. The cursor should automatically move to the next line when one line is full.

( ) Press the COMMIT key (F10). Press ENTER in response to prompt.
until the popup disappears and the primary screen reappears.

- The text flag should be set to 'Y'.
- Select and update text that already exists.
Block Title: Persons Associated With SAF
Block Table: EVENT-PERSON
Block Usage: Full Function

Block Help

This table identifies a specific person that is related to a sampling event. The nature of the relationship is determined by the RELATIONSHIP field; valid field values are available through a LOV.

Block Test Plan

( ) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

( ) Block help describes:
   ( ) Purpose of the block
   ( ) Options available in the block
   ( ) The relationship of the block to the transaction or to the principal parent block of the transaction
   ( ) Navigation to other blocks of the transaction

( ) Where block synchronization is used, ensure that the block data is in sync with the parent block.

( ) Query a single record:
   ( ) A single record is retrieved.
   ( ) Pressing the F12 key clears the record and permits entering a second query.
   ( ) The second query successfully retrieves the desired data.

( ) Query multiple records using wild cards:
   ( ) Pressing F12 clears the block and makes the block ready for a query.
   ( ) A query composed of a trailing $ wildcard retrieves the desired data.
   ( ) A query using a prefix $ wildcard retrieves the correct data.
   ( ) A query using both prefix and suffix $ wildcards retrieves the correct data.
   ( ) A query using the underscore (_) position wildcard retrieves the correct data.

( ) Verify that the data queries in the block are ordered logically.

( ) Store a series of records using the F6 [duplicate record] key to carry forward field values from the previously stored record.
(✓) Attempting to store the duplicated record without change should result in an error.
(✓) Change key fields and store the record. It should store successfully.

Update a record:
(✓) The change count should increment.
(✓) The date updated should become the current date.
(✓) An error should occur if the operator owner identifier does not match the data owner identifier.

Delete a record from the block:
(✓) If the record has dependent records, the delete should fail unless the help text indicates that a cascading delete is permitted.
(✓) Use the clear rod key (CTRL/F8).
(✓) For a single record block, the block should clear.
(✓) For a multi-record block, the record pointed to by the cursor should clear.

Field Prompt: Re!
Field Usage: Non Updateable
Field Name: RELATIONSHIP

This field contains a three-character code that defines the relationship between this person and the sap. Use LQV to display a list of valid values for this relationship.

This data field:
- Provides a default value. To accept the default value, press the ENTER key or TAB key.
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

✓ Verify that the field accepts character or numeric data within the limits imposed by validation criteria.
Field Test Plan

1. Enter data beyond the length of the field.
   - If autoskip is in effect, cursor will skip to the next field.
   - If no autoskip, cursor will remain at the end of the field and
     overlay characters, leaving the last character keyed in the
     last position of the field.

2. Display column help. Verify that the narrative adequately
   describes the column’s purpose and functions in end-user terms.

3. Attempt to change data in the field. An error should result.
   - Use the spacebar to attempt to change data.
   - Use the clear field key (F8) to attempt to change data.

4. Attempt to delete data in the field. An error should result.
   - Use the spacebar to attempt to delete data.
   - Use the clear field key (F8) to attempt to delete data.

5. Enter query mode and verify that this field is accessible.

6. Enter query mode and enter a valid value in this field.
   - Only records matching the entered value should be displayed.

7. Attempt to delete an existing data field value. An error should
   result when <F10> or <Enter> are pressed.
   - Use the space bar to attempt to delete the field data.
   - Use clear field (F8) to attempt to delete the field data.

8. Enter data into the field, backspace the data out of the field
   and attempt to TAB to the next field. An error should occur.

9. Test LOV:
   - Select the first entry in the LOV.
   - Select the last entry in the LOV.
   - Use the FIND option and select an entry.

10. Enter a duplicate value. An error should occur.

11. From LOV, select a value already present in the database. An
    error should occur.

12. Attempt to enter an invalid relationship. An error should occur.
Field Prompt: Customer Name
Field Usage: Updateable
Field Name: NAME_PERSON

Field Help

This field contains the name of the person; order first name or initial, middle initials (optional), and last name.

This data field:
- Is optional and may be left empty.
- May contain any character combination.
- All input is converted to upper case.

Field Test Plan

✓ Verify that the field accepts character or numeric data within the limits imposed by validation criteria.
✓ Enter data beyond the length of the field:
  ✓ If autoskip is in effect, cursor will skip to the next field.
  ✓ If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.
✓ Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.
✓ Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
✓ Change the field, committing after each change.
✓ Change the field where a range of valid values exists:
  ✓ Value below valid range should display message COM00101 or COM00103 (if no LOV).
  ✓ Value above valid range should display message COM00101 or COM00103 (if no LOV).
  ✓ Minimum value within the range should be accepted.
  ✓ Maximum value within the range should be accepted.
  ✓ Random value within the range should be accepted.
✓ Enter query mode and verify that this field is accessible.
✓ Enter query mode and enter a valid value in this field.
✓ Only records matching the entered value should be displayed.
✓ Skip the field using the TAB key.
✓ Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null.
value.

[✓] Delete an existing value. The field should be cleared and stored:

[✓] Delete the value using the space bar.

[✓] Delete the value using the clear field key (F8).
Field Prompt: Phone  
Field Usage: Updateable  
Field Name: ADDR_PHONE  

This field contains the telephone number of the person identified. Use the full seven-digit telephone number.

This data field:
- Is optional and may be left empty.
- May contain any character combination.
- All input is converted to upper case.

Field Test Plan

(✓) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

(✓) Enter data beyond the length of the field:
   (✓) If autoskip is in effect, cursor will skip to the next field.
   (✓) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

(✓) Display column help. Verify that the narrative adequately describes the column’s purpose and functions in end-user terms.

(✓) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.

(✓) Change the field, committing after each change.
   (✓) Change the field where a range of valid values exists:
         (✓) Value below valid range should display message COM00101 or COM00103 (if no LOV).
         (✓) Value above valid range should display message COM00101 or COM00103 (if no LOV).
         (✓) Minimum value within the range should be accepted.
         (✓) Maximum value within the range should be accepted.
         (✓) Random value within the range should be accepted.

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.
   (✓) Only records matching the entered value should be displayed.

(✓) Skip the field using the TAB key.

(✓) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null
Delete an existing value. The field should be cleared and stored:

- Delete the value using the space bar.
- Delete the value using the clear field key (F8).
Field Prompt: MSIN
Field Usage: Updateable
Field Name: ADDR_MS

Field Help:
---
This field contains the mail stop code for the person identified. The mail stop code should be entered as xx/xx.

---
This data field:
- is optional and may be left empty.
- may contain any character combination.
- all input is converted to upper case.

Field Test Plan
---
(✓) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.
(✓) Enter data beyond the length of the field:
   (✓) If ‘autoskip’ is in effect, cursor will skip to the next field.
   (✓) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.
(✓) Display column help. Verify that the narrative adequately describes the column’s purpose and functions in end-user terms.
(✓) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
(✓) Change the field, committing after each change.
   (✓) Change the field where a range of valid values exists:
      (✓) Value below valid range should display message COM00101 or COM00103 (if no LOV).
      (✓) Value above valid range should display message COM00101 or COM00103 (if no LOV).
      (✓) Minimum value within the range should be accepted.
      (✓) Maximum value within the range should be accepted.
      (✓) Random value within the range should be accepted.
(✓) Enter query mode and verify that this field is accessible.
(✓) Enter query mode and enter a valid value in this field.
(✓) Only records matching the entered value should be displayed.
(✓) Skip the field using the TAB key.
(✓) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null
value.

- Delete an existing value. The field should be cleared and stored:
  - Delete the value using the space bar.
  - Delete the value using the clear field key (F8).
Block Title: Customer Organization
Block Table: EVENT ORGAN J
Block Usage: Full Function

Block Help:

This table identifies a specific organization that is related to a sampling event. The nature of the relationship is determined by the RELATIONSHIP field; valid field values are available through a LOV.

Block Test Plan

// Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

() Block help describes:

// Purpose of the block:

// Options available in the block:

// The relationship of the block to the transaction or to the principal parent block of the transaction

// Navigation to other blocks of the transaction

() Where block synchronization is used, ensure that the block data is in sync with the parent block.

() Query a single record:

() A single record is retrieved.

() Pressing the F12 key clears the record and permits entering a second query.

() The second query successfully retrieves the desired data.

() Query multiple records using wild cards:

() Pressing F12 clears the block and makes the block ready for a query.

() A query composed of a trailing % wildcard retrieves the desired data.

() A query using a prefix % wildcard retrieves the correct data.

() A query using both prefix and suffix % wildcards retrieves the correct data.

() A query using the underscore (_) position wildcard retrieves the correct data.

() Verify that the data queries in the block are ordered logically.

() Store a series of records using the F6 [duplicate record] key to carry forward field values from the previously stored record.
() Attempting to store the duplicated record without change
should result in an error.

() Change key fields and store the record. It should store
successfully.

() Update a record:
() The change count should increment.
() The date updated should become the current date.
() An error should occur if the operator owner identifier does
not match the data owner identifier.

() Delete a record from the block:
() If the record has dependent records, the delete should fail
unless the help text indicates that a cascading delete is
permitted.

() Use the clear rcd key (CTRL/F8).
() For a single record block, the block should clear.
() For a multi-record block, the record pointed to by the
cursor should clear.

() Use the delete key.
() For a single record block, the block should clear. If
multiple occurrences of the block’s table have been
retrieved, the next record in the set should appear in
the block.
() For a multiple record block, the entry should clear. If
multiple occurrences of the block’s table have been
retrieved, the next record in the set should move up to
fill the cleared space.

Field Prompt: Org Code
Field Usage: Queryable Only
Field Name: IDENT_ORGAN

Field Help:

This field uniquely identifies the data item to the
database. An error will occur if you attempt to enter
a duplicate value already present in the database.
The format is: XXX/XXX (alphanumeric).

No Entry

Field Test Plan

() Enter query mode and verify that this field is accessible.

() Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.

( ) Enter a duplicate value. An error should occur.

( ) From LOV, select a value already present in the database. An
error should occur.

Field Prompt:

Field Usage: Queryable Only.

Field Name: TITLE

Field Help:

Enter a 1-40 title for the data item. The title should
be as descriptive as possible. It will be placed in the
database in all caps form.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.

Field Test Plan:

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.

( ) Enter a duplicate value. An error should occur.

( ) From LOV, select a value already present in the database. An
error should occur.
I. Transaction

This block is used to store sample request information. A sample request defined for every laboratory that will perform sampling activity for this SAF. All sampling activity defined for one sampling request must go to the same lab.

Block Test Plan

✓ Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

✓ Block help describes:

✓ Purpose of the block
✓ Options available in the block
✓ The relationship of the block to the transaction or to the principal parent block of the transaction
✓ Navigation to other blocks of the transaction

✓ Where block synchronization is used, ensure that the block data is in sync with the parent block.

✓ Query a single record:

✓ A single record is retrieved.
✓ Pressing the F12 key clears the record and permits entering a second query.
✓ The second query successfully retrieves the desired data.

✓ Query multiple records using wild cards:

✓ A query composed of a trailing % wildcard retrieves the desired data.
✓ A query using a prefix % wildcard retrieves the correct data.
✓ A query using the underscore (_) position wildcard retrieves the correct data.
✓ Verify that the data queries in the block are ordered logically.
Store a series of records using the F6 [duplicate record] key to carry forward field values from the previously stored record.

Attempting to store the duplicated record without change should result in an error.

Change key fields and store the record. It should store successfully.

Update a record:

The change count should increment.
The date updated should become the current date.
An error should occur if the operator owner identifier does not match the data owner identifier.

Delete a record from the block:

If the record has dependent records, the delete should fail unless the help text indicates that a cascading delete is permitted.

Use the clear rcd key (CTRL/F8).

For a single record block, the block should clear.
For a multi-record block, the record pointed to by the cursor should clear.

Use the delete key.

For a single record block, the block should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should appear in the block.

For a multiple record block, the entry should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should move up to fill the cleared space.

Verify that a default sample request ID is created when a record is commited with the request ID as blank. Should be the next number in sequence.

Verify that sample request duplication works correctly.

F6 Duplicates sample request above current one.
All of the request line items EXACTLY match the original one.
All of the sample lines EXACTLY match the original one.

Field Prompt: Lab
Field Usage: Queryable Only
Field Name: IDENT_LAB

This field uniquely identifies the data item to the database. An error will occur if you attempt to enter a identification value already present in the database.

Data Type: String
Size: 15

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
Field Help:

- All input is converted to upper case.

Field Test Plan:

1) Enter query mode and verify that this field is accessible.
2) Enter query mode and enter a valid value in this field.
3) Only records matching the entered value should be displayed.
Field Prompt: Request ID
Field Usage: Updateable
Field Name: IDENT_SAMP_REQUEST

Field Help:
A unique identifier for this sample request. Usually a sequence number for the sample requests within this SAF. If nothing is entered, the next sequence number will be automatically generated.

This data field:
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.
- May contain any character combination.
- Must be unique within a SAF.

Field Test Plan

( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.
( ) Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.
( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.
( ) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
   ( ) Change the field, committing after each change
   ( ) Change the field where a range of valid values exists:
      ( ) Value below valid range should display message COM0101 or COM0103 (if no LOV).
      ( ) Value above valid range should display message COM0101 or COM0103 (if no LOV).
( ) Minimum value within the range should be accepted.
( ) Maximum value within the range should be accepted.
( ) Random value within the range should be accepted.

( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.
( ) Attempt to delete an existing data field value. An error should result when <F10> or <Enter> are pressed.
Use the space bar to attempt to delete the field data.
( ) Use clear field (F8) to attempt to delete the field data.

( ) Enter data into the field, backspace the data out of the field and attempt to Tab to the next field. An error should occur.

( ) Enter a duplicate value. An error should occur.

( ) From LOV, select a value already present in the database. An error should occur.
Field Prompt: Pu
Field Usage: Updateable.
Field Name: SAMPLE_PURPOSE

Field Help:

This field defines the purpose for this sample request. List of Values is available.

This data field:
- All data is converted to upper case.
- Provides a default value. To accept the default value press the ENTER or TAB key.
- Must contain a valid value. Blank is not allowed.
- List of Values is available.

Field Test Plan:

✓ Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

✓ Enter data beyond the length of the field:
  ( ) If autocommit is in effect, cursor will skip to the next field.
  ( ) If no autocommit, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

✓ Display column help. Verify that the narrative adequately describes the column’s purpose and functions in end-user terms.

✓ Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
  ( ) Change the field, committing after each change.
  ( ) Change the field where a range of valid values exists:
    ( ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
    ( ) Value above valid range should display message COM00101 or COM00103 (if no LOV).
    ( ) Minimum value within the range should be accepted.
    ( ) Maximum value within the range should be accepted.
    ( ) Random value within the range should be accepted.

✓ Enter query mode and verify that this field is accessible.
✓ Enter query mode and enter a valid value in this field.
✓ Only records matching the entered value should be displayed.

✓ Skip the field using the TAB key.
Enter data into the field, backspace the data out of the field
and TAB to the next field. The database should contain a null
value.

() Delete an existing value: The field should be cleared and stored:

() Delete the value using the space bar.

() Delete the value using the clear field key (F8).

() Test LOV:

() Select the first entry in the LOV.

() Select the last entry in the LOV.

() Use the FIND option and select an entry.

Field Prompt: pose
Field Usage: Queryable Only
Field Name: DESCRIPTION

Field Help
_____________________________________________________

Enter the 1-30 character description of the sample purpose code.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan
_____________________________________________________

() Enter query mode and verify that this field is accessible.

() Enter query mode and enter a valid value in this field.

() Only records matching the entered value should be displayed.
Field Prompt: Text?
Field Usage: Queryable Only
Field Name: FLAG_TEXT

Field Help:

Field Test Plan

✓ Enter query mode and verify that this field is accessible.
✓ Enter query mode and enter a valid value in this field.
✓ Only records matching the entered value should be displayed.

Test LOV:
✓ Select the first entry in the LOV.
✓ Select the last entry in the LOV.
✓ Use the FIND option and select an entry.
✓ Press the TEXT key (F7). The text popup should be displayed.
✓ With the cursor at the text type, press LOV (F9). Where available, a list of other text types available for the entry will be displayed. Select one text type for testing.
✓ Press the ENTER key to move the cursor to the text block.
✓ Enter two lines of text. The cursor should automatically move to the next line when one line is full.
✓ Press the COMMIT key (F10). Press ENTER in response to prompt until the popup disappears and the primary screen reappears.
✓ The text flag should be set to 'Y'.
✓ Select and update text that already exists.
Block Title: Sample Analysis Request Line Item
Block Table: SAMPLE_ANALYSIS_REQ_LINE
Block Usage: Full Function

Block Help

This block represents a list of analyses that are to be performed for this sample. Each line represents one analysis (or Method) to be performed. When the analysis class and method are entered the system will determine the default bottle quantity, type, size and preservative for the selected lab and automatically enter them into the record. These values may be overridden if desired.

The field "Req Num" (request number) is used to determine how many bottle sets are to be used to collect the sample. If more than one method are to be performed from one bottle set (ie from one set of 1-many bottles with the same type, size, and preservative) then they must have the same "Req Num". The system will not allow two records to have the same "Req Num" unless this is the case.

Block Test Plan

(✓) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

(✓) Block help describes:
   (✓) Purpose of the block
   (✓) Options available in the block
   (✓) The relationship of the block to the transaction or to the principal parent block of the transaction
   (✓) Navigation to other blocks of the transaction

✓ Where block synchronization is used, ensure that the block data is in sync with the parent block.

(✓) Query a single record:
   (✓) A single record is retrieved.
   (✓) Pressing the F12 key clears the record and permits entering a second query.
   (✓) The second query successfully retrieves the desired data.

✓ Query multiple records using wild cards:
   (✓) Pressing F12 clears the block and makes the block ready for a query.
   (✓) A query composed of a trailing % wildcard retrieves the desired data.
   (✓) A query using a prefix % wildcard retrieves the correct
( ) Verify that the data queries in the block are ordered logically.

( ) Store a series of records using the F6 [duplicate record] key to carry forward field values from the previously stored record.

( ) Attempting to store the duplicated record without change should result in an error.

( ) Change key fields and store the record. It should store successfully.

( ) Update a record:

( ) The change count should increment.
( ) The date updated should become the current date.
( ) An error should occur if the operator owner identifier does not match the data owner identifier.

( ) Delete a record from the block:

( ) If the record has dependent records, the delete should fail unless the help text indicates that a cascading delete is permitted.
( ) Use the clear rcd key [CTRL/F8].
( ) For a single record block, the block should clear.
( ) For a multi-record block, the record pointed to by the cursor should clear.

( ) Use the delete key.
( ) For a single record block, the block should clear. If multiple occurrences of the block’s table have been retrieved, the next record in the set should appear in the block.
( ) For a multiple record block, the entry should clear. If multiple occurrences of the block’s table have been retrieved, the next record in the set should move up to fill the cleared space.

( ) Verify that all methods selected in the SAP are copied to the SAP.

( ) Verify that a new "Req Num" is generated when nothing is entered into this field.

( ) Verify that the correct qty, type, size, and preservative is defaulted into the current record after the method is entered. (This should be based on the method and the lab)

( ) Verify that the request lines are merged correctly. ( ) Does not allow "Req Num" to be changed to a number with mis-matching bottle information.
Does not allow the bottle information for an existing record to be changed so that it does not match other records with the same "Req Num".

Field Prompt: EXTR
Field Usage: Queryable Only
Field Name: EXTRACTION TIME
Field Help:
Enter the 1-5 character numeric field to identify the number of days from sample extraction to lab analysis.

This data field:
- Is optional and may be left empty.
- Must contain a numeric value

Field Test Plan:

( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.
( ) Attempt to store decimal data. Data to the limit of the decimal places provided by the field definition will be allowed.
( ) Help for the field should identify the number of decimal places allowed.
( ) Store a data value without decimal. The value should be zero to the right of the decimal place.
( ) Store a single digit decimal value.
( ) Store a decimal value to the maximum number of allowed decimal positions.
( ) Store a decimal value greater than the maximum number of allowed decimal positions. An error should occur.
Field Prompt: HOLDING TIME
Field Usage: Queryable Only
Field Name: HOLDING TIME

Field Help
The number of days, to 2 decimal places, allowed for the processing of a sample.

This data field:
- Is optional and may be left empty.
- May contain any character combination.
- All input is converted to upper case.

Field Test Plan
( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.

Field Prompt: IDENT METHOD
Field Usage: Queryable Only
Field Name: IDENT METHOD

Field Help
This field uniquely identifies the method to the database. An error will occur if you attempt to enter a identification value already present in the database.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan
( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.
Field Prompt: Num
Field Usage: Updateable
Field Name: IDENT_SAMPANAL

Field Help:

This is the analysis request line number. Every analysis record with the same value in this field will be done using the same set of bottles. This is done to allow several analyses to be done from the same set of bottles. When more than one record uses the same request number, the bottle qty., type, size, and perservative needs to be the same for every record. If a request number is entered that has been entered previously, a warning message to this effect will be displayed. If nothing is entered into this field, the system will default it to the next number in sequence.

This data field:
- Must contain a valid value. A blank is not allowed.
- Must contain a numeric value (1-999)

Field Test Plan:

✓ Attempt to store alphabetic characters in the field. An error should result.
✓ Begin the field entry with a space. An error should result.
✓ Attempt to enter a longer data value than allowed.
✓ Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.
✓ Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
✓ Change the field, committing after each change.
✓ Change the field where a range of valid values exists:
  ✓ Value below valid range should display message COM00101 or COM00103 (if no LOV).
  ✓ Value above valid range should display message COM00101 or COM00103 (if no LOV).
  ✓ Minimum value within the range should be accepted.
  ✓ Maximum value within the range should be accepted.
  ✓ Random value within the range should be accepted.
✓ Enter query mode and verify that this field is accessible.
✓ Enter query mode and enter a valid value in this field.
✓ Only records matching the entered value should be displayed.
Attempt to enter a decimal value. An error should occur.

Attempt to delete an existing data field value. An error should result when <F10> or <Enter> are pressed.

Use the space bar to attempt to delete the field data.

Use clear field (F8) to attempt to delete the field data.

Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.
Field Prompt: Qty
Field Usage: Updateable
Field Name: COUNT_BOTTLES

Field Help:
This is the quantity of bottles needed for this analysis. It is
defaulted from information defined for the selected method. The
default value may be overridden if needed.

This data field:
- Provides a default value. To accept the default value, press the
  ENTER key or TAB key.
- Must contain a numeric value (0-9).

Field Test Plan:

1) Attempt to store alphabetic characters in the field. An error
should result.

2) Begin the field entry with a space. An error should result.

3) Attempt to enter a longer data value than allowed.

4) Display column help. Verify that the narrative adequately
   describes the column’s purpose and functions in end-user terms.

5) Change the field in an existing record. Verify that the change
   occurred by displaying the record on the screen before and after
   the changes were made.

6) Change the field, committing after each change.

7) Change the field where a range of valid values exists:
   ( ) Value below valid range should display message COM00101 or
     COM00103 (if no LOV).
   ( ) Value above valid range should display message COM00101 or
     COM00103 (if no LOV).
   ( ) Minimum value within the range should be accepted.
   ( ) Maximum value within the range should be accepted.
   ( ) Random value within the range should be accepted.

8) Enter query mode and verify that this field is accessible.

9) Enter query mode and enter a valid value in this field.

10) Only records matching the entered value should be displayed.

11) Attempt to enter a decimal value. An error should occur;

12) Accept the default.
Modify each default value with a valid alternative.
( ) Modify each default value with an invalid alternative.
( ) Skip the field using the TAB key.
( ) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.
( ) Delete an existing value. The field should be cleared and stored:
( ) Delete the value using the space bar.
( ) Delete the value using the clear field key (F8):
Field Prompt: Typ
Field Usage: Updateable
Field Name: TYPE_BOTTLE_COMPOSITION

Field Help

This field determines the type of bottle that needs to be used for this analysis (Examples: G=Glass, P=Plastic). It will be defaulted from information defined with the method selected. The default value may be overridden. Use LOV to see a complete list of bottle types.

This data field:
- Is mandatory. Blank may not be entered.
- All input is converted to upper case.

Field Test Plan

( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

( ) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
   ( ) Change the field, committing after each change.
   ( ) Change the field where a range of valid values exists:
      ( ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
      ( ) Value above valid range should display message COM00101 or COM00103 (if no LOV).
      ( ) Minimum value within the range should be accepted.
      ( ) Maximum value within the range should be accepted.
      ( ) Random value within the range should be accepted.

( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.
( ) Skip the field using the TAB key.
( ) Enter data into the field, backspace the data out of the field
and TAB to the next field. The database should contain a null value.

(*) Delete an existing value. The field should be cleared and stored:

(*) Delete the value using the space bar.
(*) Delete the value using the clear field key (F8).

Booklet wrong
Field Prompt: Size
Field Usage: Updateable
Field Name: SIZE_BOTTLE

Field Help

Field Test Plan

( ) Attempt to store alphabetic characters in the field. An error should result.
( ) Begin the field entry with a space. An error should result.
( ) Attempt to enter a longer data value than allowed.
( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.
( ) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
( ) Change the field, committing after each change.
( ) Change the field where a range of valid values exists:
   ( ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
   ( ) Value above valid range should display message COM00101 or COM00103 (if no LOV).
   ( ) Minimum value within the range should be accepted.
   ( ) Maximum value within the range should be accepted.
   ( ) Random value within the range should be accepted.
( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.
( ) Attempt to enter a decimal value. An error should occur.
( ) Skip the field using the TAB key.
( ) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.
( ) Delete an existing value. The field should be cleared and stored.
   ( ) Delete the value using the space bar.
   ( ) Delete the value using the clear field key (F8).
Field Prompt: Preserv.
Field Usage: Updateable,
Field Name: PRESERVATIVE

Field Help:

This field determines the preservative that needs to be used for this analysis. It will be defaulted from information defined with the method selected. The default value may be overridden. LOV is available for this field.

This data field:
- Is mandatory. Blank may not be entered.
- All input is converted to upper case.

Field Test Plan

(1) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

(2) Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

(3) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

(4) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
   ( ) Change the field, committing after each change.
   ( ) Change the field where a range of valid values exists:
     ( ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
     ( ) Value above valid range should display message COM00101 or COM00103 (if no LOV).
     ( ) Minimum value within the range should be accepted.
     ( ) Maximum value within the range should be accepted.
     ( ) Random value within the range should be accepted.

(5) Enter query mode and verify that this field is accessible.

(6) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

(7) Skip the field using the TAB key.

(8) Enter data into the field, backspace the data out of the field
and TAB to the next field. The database should contain a null value.

( ) Delete an existing value. The field should be cleared and stored.

( ) Delete the value using the space bar.
( ) Delete the value using the CLEAR field key (CB).

Test LOV:
( ) Select the first entry in the LOV.
( ) Select the last entry in the LOV.
( ) Use the FIND option and select an entry.
Block Title: Samples at each Location
Block Table: SAMPLE
Block Usage: Full Function

Block Help:

This block shows the list of samples that have been defined for this sample request. Each sample may be for a different location, may be for a different location, and have a different purpose (i.e., Primary, Blank, Dup).

Block Test Plan

(✓) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

✓ Block help describes:

✓ Purpose of the block
✓ Options available in the block
✓ The relationship of the block to the transaction or to the principal parent block of the transaction
✓ Navigation to other blocks of the transaction

✓ Where block synchronization is used, ensure that the block data is in sync with the parent block.

✓ Query a single record:

✓ A single record is retrieved.
✓ Pressing the F12 key clears the record and permits entering a second query.
✓ The second query successfully retrieves the desired data.

✓ Query multiple records using wild cards:

✓ Pressing F12 clears the block and makes the block ready for a query.
✓ A query composed of a trailing % wildcard retrieves the desired data.
✓ A query using a prefix % wildcard retrieves the correct data.
✓ A query using both prefix and suffix % wildcards retrieves the correct data.
✓ A query using the underscore (_) position wildcard retrieves the correct data.

✓ Verify that the data queries in the block are ordered logically.

✓ Store a series of records using the F6 [duplicate record] key to
carry forward field values from the previously stored record.

(*) Attempting to store the duplicated record without change should result in an error.
(*) Change key fields and store the record. It should store successfully.
(*) Update a record:
     (*) The change count should increment.
     (*) The date updated should become the current date.
     (*) An error should occur if the operator owner identifier does not match the data owner identifier.
(*) Delete a record from the block:
     (*) If the record has dependent records, the delete should fail unless the help text indicates that a cascading delete is permitted.
     (*) Use the clear record key (CTRL/F8).
     (*) For a single record block, the block should clear.
     (*) For a multi-record block, the record pointed to by the cursor should clear.
(*) Use the delete key.
     (*) For a single record block, the block should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should appear in the block.
     (*) For a multiple record block, the entry should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should move up to fill the cleared space.
(*) Verify that a sample record is created for each location defined in the SAP for each sample request.
(*) Verify that new sample records may be created.

Field Prompt: Sample ID
Field Usage: Updateable
Field Name: IDENT_SAMPLE

Field Help
This field uniquely identifies the sample to the database. An error will occur if you attempt to enter a identification value already present in the database. These records are automatically created with a temporary Sample ID. When the field data is entered, the HEIS number will be entered as the Sample ID.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.
Field Test Plan

(✓) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

(*) Enter data beyond the length of the field:
   (✓) If autotrip is in effect, cursor will skip to the next field.
   (*) If no autotrip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

(*) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

(*) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.

(*) Change the field, committing after each change.

(*) Change the field where a range of valid values exists:
   (✓) Value below valid range should display message COM00101 or COM00103 (if no LOV).
   (*) Value above valid range should display message COM00101 or COM00103 (if no LOV).
   (✓) Minimum value within the range should be accepted.
   (*) Maximum value within the range should be accepted.
   (*) Random value within the range should be accepted.

(*) Enter query mode and verify that this field is accessible.

(*) Enter query mode and enter a valid value in this field.
   (✓) Only records matching the entered value should be displayed.

(*) Attempt to delete an existing data field value. An error should result when <F10> or <Enter> are pressed.
   (*) Use the space bar to attempt to delete the field data.
   (*) Use CLEAR FIELD (F9) to attempt to delete the field data.

(*) Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.

(*) Enter a duplicate value. An error should occur.

(*) From LOV, select a value already present in the database. An error should occur.
Field Prompt: Pu
Field Usage: Updateable
Field Name: SAMP_PURPOSE

Field Help:

The field defines the purpose for this sample. List of values is available.

This data field:
- All data is converted to upper case
- Provides a default value. To accept the default value press the ENTER or TAB key
- Must contain a valid value. Blank is not allowed.

Field Test Plan:

1. Verify that the field accepts character or numeric data within the limits imposed by validation criteria.
2. Enter data beyond the length of the field:
   - If autoskip is in effect, cursor will skip to the next field.
   - If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.
3. Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.
4. Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
5. Change the field, committing after each change.
6. Change the field where a range of valid values exists:
   - Value below valid range should display message COM00101 or COM0103 (if no LOV).
   - Value above valid range should display message COM00101 or COM0103 (if no LOV).
   - Minimum value within the range should be accepted.
   - Maximum value within the range should be accepted.
   - Random value within the range should be accepted.
7. Enter query mode and verify that this field is accessible.
8. Enter query mode and enter a valid value in this field.
9. Only records matching the entered value should be displayed.
10. Skip the field using the TAB key.
Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

Select an existing value: The field should be cleared and stored.

- Delete the value using the space bar.
- Delete the value using the clear field key (F8).

Test LOV:
- Select the first entry in the LOV.
- Select the last entry in the LOV.
- Use the FIND option and select an entry.
Comment ID: 1013  Priority: LOW  Date: 22-APR-93
Status: HANDLED  Date: 22-APR-93  Class: TYPF
Assigned To: KEN ATKINS
Entered By: TODD ADAMS
System ID: Oracle ROWID: 00000133.0002.0009
Last Error: -0
Last Msg: FRM-40350 Query caused no records to be retrieved.
Table: EVENT ORGAN_J
Block: EVEORG
Field: EVEORG.DSP_IDENT_ORGAN

DESCRIPTION

No field level help available for org.

CORRECTIVE ACTION

Added help to field, modified form to access ID field instead of GENERIC IDENT field.
Application: LEMIS  Liquid Effluent Monitoring Information System

Transaction: LE2120U1 Sample Authorization Form

Status : HANDLED  Date: 22-APR-93  Class:
Type : PROBLEM
Assigned To : KEN ATKINS
Entered By : TODD ADAMS
System ID : Oracle ROWID: 0000013E.0002.0009
Last Error : -0
Last Msg : FRM-40202  Field must be entered.
Table : EVENT_ORGAN_J
Block : EVEORG
Field : EVEORG.DSP_IDENT_ORGAN

DESCRIPTION

Wont let me delete the organization record. Says I may only have one organization.

CORRECTIVE ACTION

I think organization is mandatory here, so an organization may never be deleted. Maybe we should discuss.
Programmer's Bug Report

Application: LEMIS       Liquid Effluent Monitoring Information System

Transaction: LE2120U1 Sample Authorization Form

<table>
<thead>
<tr>
<th>Comment ID</th>
<th>1015</th>
<th>Priority: LOW</th>
<th>Date: 22-APR-93</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>HANDLED</td>
<td>Date: 22-APR-93</td>
<td>Class:</td>
</tr>
<tr>
<td>Type</td>
<td>PROBLEM</td>
<td>Assigned To: KEN ATKINS</td>
<td>Entered By: TODD ADAMS</td>
</tr>
<tr>
<td>System ID</td>
<td></td>
<td>Oracle ROWID:</td>
<td></td>
</tr>
<tr>
<td>Last Error</td>
<td>0</td>
<td>FRM-40350</td>
<td>Query caused no records to be retrieved.</td>
</tr>
<tr>
<td>Table</td>
<td>SAMPLE_REQUEST</td>
<td>Block: SAMREQ</td>
<td>Field: SAMREQ.IDENT_SAMP_REQ EST</td>
</tr>
</tbody>
</table>

DESCRIPTION

Another nit. Missing the word "is" in second line of block help.

CORRECTIVE ACTION

Fixed
Ken- I could see where this might be confusing to the users. The help says it must contain a value but they tab past the field and it stays blank until commit is pressed. The help should let them know that if they don't enter anything, the sequence will automatically fill in AFTER they press commit.

CORRECTIVE ACTION
The field help DID state that if nothing was entered, a value would default. However it also stated that a value was mandatory. Help has been fixed.
Is it o.k. that you cant delete a sample request record once you commit?

CORRECTIVE ACTION

You CAN delete a sample request, you just have to delete ALL of the request lines and sample records associated with the sample request FIRST. Maybe we should discuss if this should cascade?
23-APR-93

Programmer's Bug Report

Application: LEMIS

Transaction: LE2120U1 Sample Authorization Form

Comment ID: 1020 Priority: LOW Date: 22-APR-93

status: HANDLED Date: 23-APR-93 class:

Assigned To: KEN ATKINS
Entered By: TODD ADAMS
System ID: 92000012803 Oracle ROWID: 000001EF.0005.0009
Last Error: -0
Last Msg: FRM-40350 Query caused no records to be retrieved.
Table: SAMPLE_ANALYSIS_REQ_LI
Block: REQLIN
Field: REQLIN.IDENT_SAMPANAL

DESIGNATION
Block help references analysis class.

CORRECTIVE ACTION
Fixed
Programmer's Bug Report

Application: LEMIS  Liquid Effluent Monitoring Information System

Transaction: LE2120U1 Sample Authorization Form

Gregory: 1022  Priority:  LOW  Date: 22-APR-93  Class:

Status:  HANDLED  Date: 23-APR-93  Class:

Type:  PROBLEM
Assigned To:  KEN ATKINS
Entered By:  TODD ADAMS
System ID:  92000012803  Oracle ROWID:  0000081D.0009.0009
Last Error:  -0
Last Msg:  FRM-40350 Query caused no records to be retrieved.
Table:  SAMPLE_ANALYSIS_REQ_LI
Block:  REQLIN
Field:  REQLIN.IDENT_SAMPANAL

DESCRIPTION

Tried inserting new sample request line at end of list and entered the same number as the one above it (different bottle info) and it let me commit.

CORRECTIVE ACTION

04/23/93 - Fixed
Programmer's Bug Report

Liquid Effluent Monitoring Information System

Transaction: LE2120U1 Sample Authorization Form

Comment ID: 1023  Priority: LOW  Date: 22-APR-93

Status: HANDLED  Date: 23-APR-93  Class: TYPF

Assigned To: KEN ATKINS
Entered By: TODD ADAMS
System ID: 92000012803
Oracle ROWID: 0000081D.000A.0009

Last Error: 0
Last Msg: FRM-40400  Transaction complete -- 1 records posted an
Table: SAMPLE_ANALYSIS_REQ_LI
Block: REQLIN
Field: REQLIN.COUNT_BOTTLES

DESCRIPTION

Inserted record in middle of request line list and gave it the same
req number as the one above it - different bottle info, but let me
commit.

CORRECTIVE ACTION

4/23/93 - Same as 1022 - Fixed
Transaction: LE2120U1 Sample Authorization Form

Comment ID: 1024  Priority: LOW  Date: 22-APR-93

Status: ASSIGNED  Date: 23-APR-93  Class: Oracle ROWID: 0000081D.OOOB.0009
Type: PROBLEM
Assigned To: KEN ATKINS
Entered By: TODD ADAMS
System ID: 92000012803  Transaction complete -- 1 records posted an
Last Error: -0  SAMPLE_ANALYSIS_REQ_LI
Table: REQLIN
Field: REQLIN. IDENT_SAMPANAL

DESCRIPTION

Inserted new req line with same number as one above it. I then
selected the same method as the one above. Let me commit. Is it o.k.
to have the exact same method/req line #?

CORRECTIVE ACTION

4/23/93 - This may be a problem, But I do not think we should add an
unique index here. The users should be able to keep this strait.
Programmer's Bug Report

Application: LEMIS Liquid Effluent Monitoring Information System

Transaction: LE2120U1 Sample Authorization Form

Comment ID: 1025 Priority: LOW Date: 22-APR-93

Status: HANDLED Date: 23-APR-93 Class:

Type: PROBLEM

Assigned To: KEN ATKINS

Entered By: TODD ADAMS

System ID: Oracle ROWID: .000001E8.000C.0009

Last Error: -0

Last Msg: FRM-40400 Transaction complete -- 2 records posted an

Table: SAMPLE

Block: SAMPLE

Field: SAMPLE.IDENT_SAMPLE

DESCRIPTION

Block help is duplicated.

CORRECTIVE ACTION

4/23/93 - Fixed
Application: LEMIS  Liquid Effluent Monitoring Information System

Transaction: LE2120U1 Sample Authorization Form

<table>
<thead>
<tr>
<th>Comment ID</th>
<th>1026</th>
<th>Priority: LOW</th>
<th>Date: 22-APR-93</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>HANDLED</td>
<td>Date: 23-APR-93</td>
<td>Class:</td>
</tr>
<tr>
<td>Type</td>
<td>PROBLEM</td>
<td>Assigned To: KEN ATKINS</td>
<td></td>
</tr>
<tr>
<td>Entered By</td>
<td>TODD ADAMS</td>
<td>System ID:</td>
<td></td>
</tr>
<tr>
<td>Last Error</td>
<td>-0</td>
<td>Last Msg: FRM-40400</td>
<td>Transaction complete -- 1 records posted an</td>
</tr>
<tr>
<td>Table</td>
<td>SAMPLE</td>
<td>Block: SAMPLE</td>
<td></td>
</tr>
<tr>
<td>Field</td>
<td>SAMPLE.IDENT_SAMPLE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Oracle ROWID: 000001E8.000F.0009

DESCRIPTION

let me enter duplicate location for a new sample id.

CORRECTIVE ACTION

4/23/93 - This may be valid. Sometimes one sample request will be returned with multiple HEIS numbers.
Programmer's Bug Report

Transaction: LE2120U1 Sample Authorization Form

Comment ID: 1027  Priority: LOW  Date: 23-APR-93

Status: HANDLED  Date: 03-MAY-93  Class:
Type: PROBLEM
Assigned To: KEN ATKINS
Entered By: LORRAINE CAMPBELL
System ID: 92000011414  Oracle ROWID:
LastError: -0
Last Msg: FRM-40352  Last row of query retrieved.
Table: SAMPLE_SCHEDULE
Block: SS
Field: SS.IDENT_SAP

DESCRIPTION

Number 1. b) states four fields. This should be changed to three fields and delete reference to Schedule ID. Field no longer exists.

CORRECTIVE ACTION

5/3/93 - Help fixed

OK
Programmer's Bug Report

Application: LEMIS Liquid Effluent Monitoring Information System

Transaction: LE2120UL Sample Authorization Form

Comment ID: 1028 Priority: LOW Date: 23-APR-93

Status: HANDLED Date: 03-MAY-93 Class:
Type: PROBLEM
Assigned To: KEN ATKINS
Entered By: LORRAINE CAMPBELL
System ID: 92000011414 Oracle ROWID:
Last Error: 0
Last Msg: FRM-40350 Query caused no records to be retrieved.
Table: SAMPLE_SCHEDULE
Block: SS
Field: SS.IDENT_SAP

DESCRIPTION
----------------------------------.------------------------------------
query not ordered logically.

CORRECTIVE ACTION
----------------------------------.------------------------------------
5/3/93 - This block is ordered by date scheduled.

OK
Application: LEMIS Liquid Effluent Monitoring Information System

Transaction: LE2120U1 Sample Authorization Form

<table>
<thead>
<tr>
<th>Comment ID</th>
<th>Priority</th>
<th>Date</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>1029</td>
<td>LOW</td>
<td>23-APR-93</td>
<td></td>
</tr>
</tbody>
</table>

Assignment:

- **Assigned To:** KEN ATKINS
- **Entered By:** LORRAINE CAMPBELL

System ID: 92000012138 Oracle ROWID:

**Last Error:** -0

**Last Msg:** FRM-40350 Query caused no records to be retrieved.

**Table:** SAMPLE AUTHORIZATION

**Block:** SAMAUT

**Field:** SAMAUT.IDENT_SAF

**HANDLED Date:** 03-MAY-93

**Class:** PROBLEM

---

**DESCRIPTION**

The query does not work in this block.

---

**CORRECTIVE ACTION**

5/3/93 - Query is not supposed to work in this block. Added to help make this clear.
Programmer's Bug Report

Application: GENERIC Application Maintenance
Transaction: LE2120U1 Sample Authorization Form

Date: 03-MAY-93

Comment ID: 1053 Priority: LOW

Status: NEW Date: 03-MAY-93 Class: PROBLEM

Assigned To: KEN ATKINS
Entered By: 92000011414 Oracle ROWID: 000005D5.0000.0009
Last Error: -0
Last Msg: -0
Table: SAMPLE_AUTHORIZATION
Block: SAMAUT
Field: SAMAUT.IDENT_SAF

DESCRIPTION

Field help still mentions schedule ID.
Programmer's Bug Report

Application: LEMIS Liquid Effluent Monitoring Information System

Transaction: LE2120U1 Sample Authorization Form

Comment ID: 1031 Priority: LOW Date: 23-APR-93

Status: HANDLED Date: 03-MAY-93 Class: PROBLEM

Assigned To: KEN ATKINS
Entered By: LORRAINE CAMPBELL
System ID: 92000011414 Oracle ROWID: 000005D5.0000.0009
Last Error: -0
Last Msg: FRM-40202 Field must be entered.
Table: SAMPLE_Authorization
Block: SAMAUT
Field: SAMAUT.DATE_REQUESTED

DESCRIPTION

Booklet states field is null, but actually the field must be entered.

CORRECTIVE ACTION

Programmer’s Bug Report

Application: LEMIS  Liquid Effluent Monitoring Information System

Transaction: LE2120U1 Sample Authorization Form

Comment ID: 1032  Priority: LOW  Date: 23-APR-93

Status: HANDLED  Date: 03-MAY-93  Class: TYPF

Assigned To: KEN ATKINS
Entered By: LORRAINE CAMPBELL

System ID: Oracle ROWID: 00000149.0005.0009

Last Error: -0

Last Msg: FRM-40350 Query caused no records to be retrieved.

Table: EVENT PERSON

Block: EVEPER

Field: EVEPER.ADDRMS

DESCRIPTION

shouldn't the format for msin be xx-xx instead of xx/xx as stated in help?

CORRECTIVE ACTION

5/3/93 - Help fixed
Application: LEMIS Liquid Effluent Monitoring Information System

Transaction: LE2120Ul Sample Authorization Form

--------------------
Comment ID: 1033 Priority: LOW Date: 23-APR-93
--------------------
Status: HANDLED Date: 03-MAY-93 Class:
Type: PROBLEM
Assigned To: KEN ATKINS
Entered By: LORRAINE CAMPBELL
System ID: 92000012986 Oracle ROWID: 00000A6D.0007.0009
LastError: -0
Last Msg: FRM-40400 Transaction complete -- 1 records posted an
Table: SAMPLE_REQUEST
Block: SAMREQ
Field: SAMREQ. IDENT_SAMP_REQ

DESCRIPTION
---------------------------------------------------------------
field automatically commits when pressing F6 duplicate field. help
maybe should state that this field automatically commits?

CORRECTIVE ACTION
---------------------------------------------------------------
5/3/93 - Help fixed (Pea Moore (41P))
Programmer's Bug Report

Application: LEMIS   Liquid Effluent Monitoring Information System

Transaction: LE2120U1 Sample Authorization Form

--- DESCRIPTION ---
Help states blank not allowed but field allows blank to be committed

--- CORRECTIVE ACTION ---
5/3/93 - Set field to be required.
**Programmer's Bug Report**

**Application:** LEMIS  
**Liquid Effluent Monitoring Information System**

**Transaction:** LE2120U1 Sample Authorization Form

<table>
<thead>
<tr>
<th>Comment ID</th>
<th>Priority</th>
<th>Date</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>1035</td>
<td>LOW</td>
<td>03-MAY-93</td>
<td></td>
</tr>
</tbody>
</table>

**Status:** ASSIGNED  
**Date:** 03-MAY-93  
**Class:** TYPF

**Assigned To:** KEN ATKINS
**Entered By:** LORRAINE CAMPBELL
**System ID:** 92000014127  
**Oracle ROWID:** 000001EE.0002.0009

**Last Error:** -0  
**Last Msg Table:** SAMPLE_ANALYSIS_REQ_LI
**Block:** REQLIN  
**Field:** REQLIN.IDENT_SAMPANAL

---

**DESCRIPTION**

Booklet states fields EXTR and HOLD are queryable but I cannot query fields.

**CORRECTIVE ACTION**

5/3/93 - Problem with test booklet. The fields are not queryable.

LC OK
Programmer's Bug Report

Application: LEMIS  Liquid Effluent Monitoring Information System

Transaction: LE2120U1 Sample Authorization Form

Comment ID: 1036  Priority: LOW  Date: 26-APR-93

Status: HANDLED  Date: 03-MAY-93  Class:
Type: PROBLEM
Assigned To: KEN ATKINS
Entered By: LORRAINE CAMPBELL
System ID: 92000014127  Oracle ROWID: 000001EE.0002.0009
Last Error: 0
Last Msg: FRM-40405  No changes to post.
Table: SAMPLE ANALYSIS_REQ_LI
Block: REQLIN
Field: REQLIN.IDENT_SAMPANAL

DESCRIPTION
---------------------------------------------------------------------
cannot query method or method type

CORRECTIVE ACTION
---------------------------------------------------------------------
5/3/93 - Made Method ID and Method Title fields queryable.

(Handwritten notes: AK and LC)
03-MAY-93

Programmer's Bug Report

Application: LEMIS

Transaction: LEMIS-SD-WM-TP-169 REV 0

Liquid Effluent Monitoring Information System

Transaction: LE2120U1 Sample Authorization Form

-----------------------------
Comment ID: 1037  Priority: LOW  Date: 26-APR-93
-----------------------------
Status: HANDLED  Date: 03-MAY-93  Class:
Type: PROBLEM
Assigned To: KEN ATKINS
Entered By: LORRAINE CAMPBELL
System ID: 92000014127  Oracle ROWID: 000001EE.0002.0009
Last Error: -0
Last Msg: FRM-40202 Field must be entered.
Table: SAMPLE_ANALYSIS_REQ_LI
Block: REQLIN
Field: REQLIN.SIZE_BOTTLE

DESCRIPTION

no field help

CORRECTIVE ACTION

5/3/93 - Field help added.

OK

LC
Programmer's Bug Report

Application: LEMIS  Liquid Effluent Monitoring Information System

Transaction: LE2120U1 Sample Authorization Form

Comment ID : 1038  Priority: LOW  Date: 26-APR-93

Status : HANDLED  Date: 03-MAY-93  Class:
Type : PROBLEM
Assigned To:  KEN ATKINS
Entered By :  LORRAINE CAMPBELL
System ID :
System ID :  Oracle ROWID: 000001E8.0002.0009

Last Error :  -0
Last Msg :  FRM-40400  Transaction complete -- 1 records posted an
Table :  SAMPLE
Block :  SAMPLE
Field :  SAMPLE.SAMP_PURPOSE

DESCRIPTION

help states a blank not allowed. Function allows a blank to be entered

CORRECTIVE ACTION

5/3/93 - Made field mandatory.
Programmer's Bug Report

Application: GENERIC  Application Maintenance

Transaction: LE2120U1 Sample Authorization Form

Comment ID: 1053  Priority: LOW  Date: 03-MAY-93

Status: HANDLED  Date: 03-MAY-93  Class:

Type: PROBLEM

Assigned To: KEN ATKINS

Entered By: KEN ATKINS

System ID: 92000011414  Oracle ROWID: 000005D5.0000.0009

Last Error: -0

Last Msg: -0

Table: SAMPLE AUTHORIZATION

Block: SAMAUT

Field: SAMAUT. IDENT_SA

DESCRIPTION

Field help still mentions schedule ID.

CORRECTIVE ACTION

5/3/93 - Help has been fixed.
1.4 LE2123U1 SAF RELEASE

LEMIS Module Test Checklist Report

Name: SAF RELEASE
Short Name: LE2123U1
Purpose: Set approval flag for release of SAF.
Initial Test Date: 2/3/93
Verification Date: 2/3/93

Module Description
This form is to be used to set the approval flag in the sample authorization table, which will signify that the SAF has been released. The only updatable field on the form will be the approval flag which will default to "N" (No) and will only allow "Y" (Yes) and "N" (No). The SAF number is a query only field and the date requested field is a display only field.

Use this form to update the approval flag for release of a SAF.

1) Enter the SAF Identification Number and press <Shift-F12>. This will "query-up" the SAF record(s) matching this entry. The Date Requested will display for each SAF.

2) Press <TAB> to move to the SAF Approved field. Enter "Y" to release the SAF. Enter "N" to unrelease the SAF.

3) Press <F10> to commit the change.
UNIT TEST CHECKLIST

Module Function Key

- Show Version : Shift-F10
- Comment/Bug : Shift-F3
- Fast Access : F5
- Back : F4 or Esc
- Main Menu : Shift-F4
- Key Template : Ctrl-F1
- Context Prnt : F11
- Query Print : Ctrl-F11
- Oracle Print : Shift-F11

Block Title: Sample Authorization
Block Table: SAMPLE_AUTHORIZATION

Testing of the transaction is performed at four levels:

1. Developer testing.
2. Secondary testing.
3. End user testing.
4. Production release & verification.

As each applicable section of this test plan is completed, the designated individual responsible for the section will sign the plan in the appropriate places. Each check off item will be completed. The status of the transaction will be updated in the data dictionary as the transaction progresses through the development and test steps.
As each individual transaction is generated, the developer performs tests against the transaction to insure that it meets specifications and works properly. Upon successful completion of this testing, the transaction is made available for secondary testing.

Test status conditions are:

1. Transaction under development, untested.
2. Transaction moved to development directory (addmod).
3. Development complete, initial unit testing in progress.
4. Help added
5. Unit Test checklist completed.
6. Specific test plan added (if needed).
7. Any bugs found in unit test fixed.
8. Updated test booklet printed.

Secondary Testing

Secondary testing is performed by a person external to the development team. Tests are performed using a standardized test checklist. Initial testing is performed to ensure that the transaction meets the functional requirements of the transaction and satisfies the test plan narrative that follows.

When problems are found:

1. The tester passes the checklist to the project manager for review and action.
2. The project manager assigns the checklist to the developer of the transaction for correction of the problems.
3. The developer corrects the described problems, records the corrective actions taken and the number of hours of corrective effort used, tests the transaction for correct operation, and returns the checklist to the project manager.
4. The project manager returns the checklist to the tester for retesting.

The above sequence of events repeats until the tester signs off the transaction as passing the test requirements.
The transaction is tested by end users for a predetermined time period. This testing is done in the development environment. If no problems are encountered, or all problems are resolved at the end of this time period, the module is ready for Project Manager review.

9 - End User testing in progress.
10 - Problem found, resolution in progress.
11 - Problem resolution complete.
   Developer __________________ Date Complete ______
12 - Resolution verified.
   Tester __________________ Date Complete ______

Production Status
13 - Ready for Project Manager review.
   The Project Manager reviews all test results and determines that the transaction has completed testing.

14 - The transaction is ready to be placed into production.
   Software files moved to production directory.
   Transaction added to production menu.
   Transaction access given to production roles.
   Validation test performed in production.
   Production documentation up to date.

15 - The transaction is in production

System Architect __________________ Date Complete 2/5/93

Module Test Plan
Display transaction help. Verify that the narrative adequately describes the purpose and functions of the transaction in end-user terms.

Transaction help describes:
- Purpose of the transaction
- Functions performed by the transaction
- Where multiple block, what happens in each block.

Block Title: Sample Authorization
Block Table: SAMPLE_AUTHORIZATION
Block Usage: Update-Only

Block Help
This block contains the header information for the SAF (Sample Authorization Form). This includes the SAF ID, Date the sampling
Block Help

Activity has been requested, and a few descriptive fields about this sampling activity. The detailed information for this SAF will be entered in subsequent blocks.

Block Test Plan

Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

- Block help describes:
  - Purpose of the block
  - Options available in the block
  - The relationship of the block to the transaction or to the principal parent block of the transaction
  - Navigation to other blocks of the transaction

Where block synchronization is used, ensure that the block data is in sync with the parent block.

Query a single record:

- A single record is retrieved.
- Pressing the F12 key clears the record and permits entering a second query.
- The second query successfully retrieves the desired data.

Query multiple records using wild cards:

- Pressing F12 clears the block and makes the block ready for a query.
- A query composed of a trailing % wildcard retrieves the desired data.
- A query using a prefix % wildcard retrieves the correct data.
- A query using both prefix and suffix % wildcards retrieves the correct data.
- A query using the underscore (_) position wildcard retrieves the correct data.

Verify that the data queries in the block are ordered logically.

Update a record:

- The change count should increment.
- The date updated should become the current date.
- An error should occur if the operator owner identifier does not match the data owner identifier.
Delete a record from the block:

( ) If the record has dependent records, the delete should fail unless the help text indicates that a cascading delete is permitted.

( ) Use the clear rcd key (CTRL/F8).

( ) For a single record block, the block should clear.

( ) For a multi-record block, the record pointed to by the cursor should clear.

( ) Use the delete key.

( ) For a single record block, the block should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should appear in the block.

( ) For a multiple record block, the entry should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should move up to fill the cleared space.

Field Prompt: SAF Id
Field Usage: Non Updateable
Field Name: IDENT_SAF

Field Help

The SAF ID should uniquely identify the SAF. If '.' is entered then the SAF ID will be defaulted to the same value as the Schedule ID.

This data field:
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.
- May contain any character combination.

Field Test Plan

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.

( ) Only records matching the entered value should be displayed.

( ) Enter a duplicate value. An error should occur.

( ) From LOV, select a value already present in the database. An error should occur.
Field Prompt: SAF APPROVED?
Field Usage: Queryable Only Updatable
Field Name: FLAG_TEXT FLAG APPROVAL

Field Help

Set this field to "Y" when the SAF is approved for release. Valid values are "Y" (Yes) and "N" (No). This field may not be left blank. The SAF approval flag may also be changed from "Y" to "N" if the SAF is unreleased.

Field Test Plan

- Verify that the field accepts character or numeric data within the limits imposed by validation criteria.
- Enter data beyond the length of the field:
  - If autoskip is in effect, cursor will skip to the next field.
  - If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.
- Enter query mode and verify that this field is accessible.
- Enter query mode and enter a valid value in this field.
  - Only records matching the entered value should be displayed.
- Skip the field using the TAB key.
- Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.
- Delete an existing value. The field should be cleared and stored:
  - Delete the value using the space bar.
  - Delete the value using the clear field key (F8).
- Test LOV:
  - Select the first entry in the LOV.
  - Select the last entry in the LOV.
  - Use the FIND option and select an entry.
1.5 LE2124U1 SCHEDULE SAMPLE

LEMIS Module Test Checklist Report

Name: SCHEDULE SAMPLE
Short Name: LE2124U1
Purpose: To schedule samples
Initial Test Date: 5/18/93  de
Verification Date: 5/18/93  de

Module Description

This transaction is used to enter and update the sampling schedule for a SAP. The only field that can be modified is the date scheduled. Sample schedules may be added from this screen. Sample schedules may be deleted from this screen if the SAF has not been entered.

Module Help

This screen is used to maintain the complete sampling activity for a particular SAP. The Date scheduled, SAF ID and Date requested are displayed. The only field that may be updated is the date scheduled. Sample schedules may be created from this screen, and deleted if a SAF has not been entered.

To display the scheduled sampling activity for a SAP:

1. A SAP will automatically be displayed in the first block if a SAP was queried from any other screen in the system. If this is not the desired SAP press <F12> to enter a query. You will see a message starting with "Enter a query;" at the bottom of the screen.

If a SAP has not been queried from another screen, this screen will immediately enter query mode and the "Enter a query;" message...
To modify the Scheduled date for scheduled sampling activity:

1. Query the desired SAP as specified above.
2. Press <PageDown> to enter the "Sample Schedule" block.
3. Use the up and down arrow keys to select the schedule to be modified.
4. Enter the new schedule date in DD/MM/YY format.

To add new sample schedules for a SAP:

1. Query the desired SAP as specified above.
2. Press <PageDown> to enter the "Sample Schedule" block.
3. Press <Insert> to open an empty record, or use the arrow keys to move to an empty record at the bottom.
4. Enter the scheduled date in DD/MM/YY format.
5. Press <F10> to commit the new schedule.

To delete a sample schedule:

1. Query the desired SAP as specified above.
2. Press <PageDown> to enter the "Sample Schedule" block.
3. Use the up and down arrow keys to select the schedule to be deleted.
4. Press <Delete> to delete the schedule. If there has been a SAF entered, the schedule may not be deleted without deleting the SAF first.

UNIT TEST CHECKLIST

( ) Module Function Key

( ) Show Version : Shift-F10 : 
( ) Comment/Bug : Shift-F3 : 
( ) Fast Access : F5 : 
( ) Back : F4 or Esc : 
( ) Main Menu : Shift-F4 : 
( ) Key Template : Ctrl-F1 : 
( ) Context Print : F11 : 
( ) Query Print : Ctrl-F11 : 
( ) Oracle Print : Shift-F11 :

( ) Block Title: SAP
( ) Block Table: EVENT
Block Title: SAP
Block Table: EVENT

<table>
<thead>
<tr>
<th>Help</th>
<th>F1</th>
<th>Key Help</th>
<th>Shift-F1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Doc</td>
<td>F2</td>
<td>Key Journal</td>
<td>Shift-F2</td>
</tr>
<tr>
<td>Related Data</td>
<td>F3</td>
<td>Edit Text</td>
<td>F7</td>
</tr>
<tr>
<td>Spec Func 1</td>
<td>Shift-F5</td>
<td>Spec Func 2</td>
<td>Ctrl-F5</td>
</tr>
<tr>
<td>Prv/Nxt Rec</td>
<td>Home/End</td>
<td>PgDn/PgUp</td>
<td>Shift-Up/Down</td>
</tr>
<tr>
<td>Prv/Nxt Field</td>
<td>Tab/Sh-Tb</td>
<td>Commit Form</td>
<td>F10</td>
</tr>
<tr>
<td>Clear Field</td>
<td>F8</td>
<td>Clear Record</td>
<td>Shift-F8</td>
</tr>
<tr>
<td>Clear Form</td>
<td>Shift-F8</td>
<td>Exit System</td>
<td>Ctrl-F4</td>
</tr>
</tbody>
</table>

Enter Query: F12
Correct Query Fields?: Uppercase and LOVs?
Correct Query Order?:

Block Title: Sample Schedule
Block Table: SAMPLE_SCHEDULE

<table>
<thead>
<tr>
<th>Help</th>
<th>F1</th>
<th>Key Help</th>
<th>Shift-F1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Doc</td>
<td>F2</td>
<td>Key Journal</td>
<td>Shift-F2</td>
</tr>
<tr>
<td>Related Data</td>
<td>F3</td>
<td>Edit Text</td>
<td>F7</td>
</tr>
<tr>
<td>Spec Func 1</td>
<td>Shift-F5</td>
<td>Spec Func 2</td>
<td>Ctrl-F5</td>
</tr>
<tr>
<td>Prv/Nxt Rec</td>
<td>Home/End</td>
<td>PgDn/PgUp</td>
<td>Shift-Up/Down</td>
</tr>
<tr>
<td>Prv/Nxt Field</td>
<td>Tab/Sh-Tb</td>
<td>Commit Form</td>
<td>F10</td>
</tr>
<tr>
<td>Clear Field</td>
<td>F8</td>
<td>Clear Record</td>
<td>Shift-F8</td>
</tr>
<tr>
<td>Clear Form</td>
<td>Shift-F8</td>
<td>Exit System</td>
<td>Ctrl-F4</td>
</tr>
</tbody>
</table>

Enter Query: F12
Correct Query Fields?: Uppercase and LOVs?
Correct Query Order?:

Insert Rec: Insert
Add record at end
Mandatory checks OK?
Validation checks OK?
List of Values OK?
Duplicate Fld: Shift-F6
Duplicate checks OK?
Optional fields marked?
Correct fields uppercase:

Delete Record: Delete

Testing of the transaction is performed at four levels:

TEST PLAN

3
1. Developer testing.
2. Secondary testing.
3. End user testing.
4. Production release & verification.

As each applicable section of this test plan is completed, the designated individual responsible for the section will sign the plan in the appropriate places. Each check off item will be completed. The status of the transaction will be updated in the data dictionary as the transaction progresses through the development and test steps.

Developer Testing

As each individual transaction is generated, the developer performs tests against the transaction to ensure that it meets specifications and works properly. Upon successful completion of this testing, the transaction is made available for secondary testing.

Test status conditions are:

1. Transaction under development, untested.
   - Transaction added to menu and security.
   - Transaction moved to development directory (addmod).
2. Development complete, initial unit testing in progress.
   - Help added
   - Unit Test checklist completed.
   - Specific test plan added (if needed).
   - Any bugs found in Unit test fixed.
   - Updated test book printed.
3. Initial unit testing complete.
   - Developer __________________________ Date Complete 5/1/93

Secondary Testing

Secondary testing is performed by a person external to the development team. Tests are performed using a standardized test checklist. Initial testing is performed to ensure that the transaction meets the functional requirements of the transaction and satisfies the test plan narrative that follows.

4. Secondary testing in progress.
5. Secondary testing complete, problems found. Resolution in progress.
6. Unable to resolve problem at this time.
7. Problem resolution complete.
8. Secondary testing complete, no problems found.

When problems are found:

1. The tester passes the checklist to the project manager for review and action.
2. The project manager assigns the checklist to the developer of the transaction for correction of the problems.
3. The developer corrects the described problems, records the corrective actions taken and the number of hours of corrective effort used, tests the transaction for correct operation, and returns the checklist to the project manager.
4. The project manager returns the checklist to the tester for retesting.

The above sequence of events repeats until the tester signs off the transaction as passing the test requirements.

End User Testing

The transaction is tested by end users for a predetermined time period. This testing is done in the development environment. If no problems are encountered, or all problems are resolved at the end of this time period, the module is ready for Project Manager review.

( ) 9 - End User testing in progress.
( ) 10 - Problem found, resolution in progress.
( ) 11 - Problem resolution complete.

Developer __________________ Date Complete __________
Tester __________________ Date Complete __________

Production Status

( ) 13 - Ready for Project Manager/System Architect review.
( ) The Project Manager or System Architect reviews all test results and determines that the transaction has completed testing.

Developer __________________ Date Complete __________
Tester __________________ Date Complete __________

( ) 14 - The transaction is ready to be placed into production.

\[
\begin{align*}
\text{Developer Date Complete} & \quad \text{Architect/Manager Date Complete} \\
\text{Software files moved to production directory.} & \quad \text{Transaction added to production menu.} \\
\text{Transaction access given to production roles.} & \quad \text{Validation test performed in production.} \\
\text{Production documentation up to date.} & \quad \text{Production documentation up to date.} \\
\end{align*}
\]

( ) 15 - The transaction has been put into production

By __________________ Date Done 5/19/98

Module Test Plan

( ) Display transaction help. Verify that the narrative adequately describes the purpose and functions of the transaction in end-user terms.
Block Title: SAP
Block Table: EVENT
Block Usage: Query Only

Block Help
This tables stores data relating to an event, including the event identifier, title, event type and related text flag.
An event is defined as a TPA Requirement, Project, QAPP, Task, SAP, or SAF.

Block Test Plan

Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

Block help describes:

- Purpose of the block
- Options available in the block
- The relationship of the block to the transaction or to the principal parent block of the transaction
- Navigation to other blocks of the transaction
Block Test Plan

( ) Where block synchronization is used, ensure that the block data is in sync with the parent block.

( ) Query a single record:

( ) A single record is retrieved.
( ) Pressing the F12 key clears the record and permits entering a second query.
( ) The second query successfully retrieves the desired data.

( ) Query multiple records using wild cards:

( ) Pressing F12 clears the block and makes the block ready for a query.
( ) A query composed of a trailing % wildcard retrieves the desired data.
( ) A query using a prefix % wildcard retrieves the correct data.
( ) A query using both prefix and suffix % wildcards retrieves the correct data.
( ) A query using the underscore (_) position wildcard retrieves the correct data.

( ) Verify that the data queries in the block are ordered logically.

Field Prompt: ID
Field Usage: Non Updateable
Field Name: IDENT_EVENT

Field Help

This field uniquely identifies the event (Requirement, Project, QAPP, SAP, or SAF) to the database. An error will occur if you attempt to enter a identification value already present in the database.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.
Field Prompt: Title
Field Usage: Non Updateable
Field Name: TITLE_EVENT

Field Help
Enter a 1-40 character descriptive title for the event.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan
Enter query mode and verify that this field is accessible.
Enter query mode and enter a valid value in this field.
Only records matching the entered value should be displayed.
Field Prompt: Rev  
Field Usage: Queryable Only  
Field Name: REV_EVENT

Field Help

The field contains the code of the latest revision of the event. The code may a numeric value from 0 through 999.

Field Test Plan

( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.
   ( ) Accept the default.
( ) Modify each default value with a valid alternative.
( ) Modify each default value with an invalid alternative.

( ) Test LOV:
   ( ) Select the first entry in the LOV.
   ( ) Select the last entry in the LOV.
   ( ) Use the FIND option and select an entry.
Block Title: Sample Schedule
Block Table: SAMPLE SCHEDULE
Block Usage: Full Function

Block Help

This table is used to query sampling schedule information. It contains information about the SAP and the SAF that is relevant to sample scheduling.

Block Test Plan

( ) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

( ) Block help describes:

( ) Purpose of the block
( ) Options available in the block
( ) The relationship of the block to the transaction or to the principal parent block of the transaction
( ) Navigation to other blocks of the transaction

( ) Where block synchronization is used, ensure that the block data is in sync with the parent block.

( ) Query a single record:

( ) A single record is retrieved.
( ) Pressing the F12 key clears the record and permits entering a second query.
( ) The second query successfully retrieves the desired data.

( ) Query multiple records using wild cards:

( ) Pressing F12 clears the block and makes the block ready for a query.
( ) A query composed of a trailing % wildcard retrieves the desired data.
( ) A query using a prefix % wildcard retrieves the correct data.
( ) A query using both prefix and suffix % wildcards retrieves the correct data.
( ) A query using the underscore (_) position wildcard retrieves the correct data.

( ) Verify that the data queries in the block are ordered logically.

( ) Store a series of records using the F6 [duplicate record] key to carry forward field values from the previously stored record.
Attempting to store the duplicated record without change should result in an error.

Change key fields and store the record. It should store successfully.

Update a record:
- Change key fields and store the record. It should store successfully.

Field Prompt: SAF ID
Field Usage: Queryable Only
Field Name: IDENT

Field Help
This field uniquely identifies the SAF for the database. It is entered when the SAF was created in the database.

Field Test Plan
( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.
Field Prompt: Scheduled Date  
Field Usage: Updateable  
Field Name: DATE_SCHEDULED

Field Help
This is the date that this sampling activity is scheduled to take place. The sampling activity may involve multiple samples taken at multiple sampling locations within a stream.

This data field:
- Must contain a valid value. A blank is not allowed.
- Date data must be entered in the format mm/dd/yy
  where:
  mm = the month of the year; months prior to 10 should have a leading zero, e.g., May should be 05
  dd = the day of the month; days prior to 10 should have a leading zero, e.g., May 1 should be shown as 01
  yy = the last two digits of the calendar year, e.g., 1992 is entered as 92

Field Test Plan

✓ Verify that the field only allows valid dates.
✓ Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

✓ Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
✓ Change the field, committing after each change.
✓ Change the field where a range of valid values exists:
  ✓ Value below valid range should display message COM00101 or COM00103 (if no LOV).
  ✓ Value above valid range should display message COM00101 or COM00103 (if no LOV).
  ✓ Minimum value within the range should be accepted.
  ✓ Maximum value within the range should be accepted.
  ✓ Random value within the range should be accepted.
✓ Enter query mode and verify that this field is accessible.
✓ Enter query mode and enter a valid value in this field.
  ✓ Only records matching the entered value should be displayed.
✓ Attempt to delete an existing data field value. An error should result when <F10> or <Enter> are pressed.
✓ Use the space bar to attempt to delete the field data.
✓ Use clear field (F8) to attempt to delete the field data.
Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.

Field Prompt: Date Requested
Field Usage: Queryable Only
Field Name: DATE_REQUESTED

Field Help
---------------------------------------------------------------
This is the date that HASM requests Mobile Sample Labs to actually take the sample.

Field Test Plan
---------------------------------------------------------------
( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.
LEMIS Module Test Checklist Report

Name: FIELD DATA DEFINITION
Short Name: LE3310U1
Purpose: Define field data for a sample
Initial Test Date: 4/29/93
Verification Date: 4/29/93

Module Description

This transaction creates the field data stub for a sample.

1. Link to a sample.
2. Create the stub information.
3. Optionally, link associated person(s).
4. Optionally, link associated resource(s).
5. Optionally, link to container(s).

Field data may contain text. ATM (atmospheric text) is a valid text code.

The sampling location(s) associated with field data are defined. Use only the location title.

For each location:

1. Identify the scheduled sampling date. This should default to the scheduled sampling date of the SAF.
2. The date and time of the collection begin will be identified as the "collection date." The date and time collection ended will be retained in the database but not displayed.
Module Description

3. The atmospheric, geographic, and flow rate data will not be displayed.

For each location, individual sample information may be entered:

1. Sample ID. The generated sample identifier is replaced by the HEIS sample number.
2. The sample purpose code and expanded name are displayed.
3. The selected lab for the sample is displayed.

Basic field data information is entered:

1) Logbook number
2) Logbook page number.
3) Conductivity.
4) pH
5) Sample clarity
6) Sample color
7) Temperature of sample
8) Chain of custody number.

Module Help

This screen is used to enter Field Data information. Field data may only be entered for SAFs which have been created in the database.

To enter field data:

1. Select SAF ID:

   A) Press <F12> to enter query mode. (If "Enter a query" appears at the bottom of the screen, F12 does not need to be pressed)
   B) Enter the SAP or SAF ID you wish to enter field data for. By entering the SAP ID, the system will return all those SAFs which are subordinate to the SAP entered, ordered by the date requested. Press <Down Arrow> to browse through the list of SAFs until you reach the one you wish to enter field data for. If the SAF ID is known, Press <Tab> until the cursor resides in the SAF ID field and enter the SAF ID. This will return only the Saf you are interested in.

2. Enter field data for a given location:

   A) Press <PageDown> to enter the "Field Data for a Location" block.
   B) The location for the SAF will be displayed. If there are multiple locations for the SAF, press <DownArrow> to browse through the locations until you reach the one you want. When
the desired location is displayed, press <Tab> to move the
cursor to the Collection Date field.
C) Enter the date the Sampling actually occurred. Press <Tab> to
move to the Chain of Custody # field.
D) Enter the identifier of the principal chain of custody form
for the sample. This field is optional. Press <Tab> to move to the Logbook Title field.
E) Enter the title of the logbook. This field is optional. Press
Tab to move to the logbook number field.
F) Enter the number of the logbook. This field is mandatory - it
may not be left empty. Press <Tab> to move to the logbook page number field.
G) Enter the page number of the logbook. This field is mandatory
and may not be left empty. Press <Tab> to move to the Sample Clarity field.
H) Enter the Sample Clarity, Color, Temperature, Conductivity,
and pH for the sample. See the field help for these fields
for a description of each. These fields are optional.
I) If desired, text may be displayed for this location
by pressing <F7>.

3. Enter Sample Numbers:

A) Press <PageDown> to move to the Sample block. The cursor will
reside in the HEIS Number field. Upon entering this block,
the HEIS Number, Purpose, and Lab fields will all have values.
These values were assigned when the SAF was entered. The
number in the HEIS Number field is a temporary, unique number
assigned to track multiple samples for a given SAF. Press
<F8> to clear the temporary number and enter the correct HEIS
Number. Press <DownArrow> and repeat this step for all the
samples for this location.
B) A new Heis Number, purpose, and lab may be entered by pressing
<Insert> or by pressing <DownArrow> until you reach a blank
line. For example, you may want to enter a duplicate sample -
To do this you would press <Insert> and enter the Heis Number.
Press <Tab> to move to the Purpose field and enter "Duplicate"
or press <LOV> and select the purpose from the list of values.
Press <Tab> and enter the Lab or press <LOW to select a valid
lab from the list of values.

C) Press <F10> to commit your input.

D) When all Heis Numbers for a given location are entered, you may
press <PageUp> to return to the Field Data for Location block.
Refer to step 2.8 to begin entering field data for the next
location.
UNIT TEST CHECKLIST

Module / Function Key

- Show Version : Shift-F10
- Comment/Bug : Shift-F3
- Fast Access : F5
- Back : F4 or Esc
- Main Menu : Shift-F4
- Key Template : Ctrl-F1
- Context Print : F11
- Query Print : Ctrl-F11
- Oracle Print : Shift-F11

Block Title: Sample Authorization
Block Table: SAMPLE_SCHEDULE

<table>
<thead>
<tr>
<th>Help</th>
<th>Home/End</th>
<th>Clear Field</th>
<th>Clear Form</th>
<th>Enter Query</th>
<th>Correct Query Fields?</th>
<th>Correct Query Order?</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1</td>
<td>Home/End</td>
<td>F8</td>
<td>Shift-F8</td>
<td>F12</td>
<td>:</td>
<td>:</td>
</tr>
<tr>
<td>F2</td>
<td>Shift-Up/Dn</td>
<td>F8</td>
<td>Shift-F8</td>
<td>F12</td>
<td>:</td>
<td>:</td>
</tr>
<tr>
<td>F3</td>
<td>Prv/Nxt Rec</td>
<td>F8</td>
<td>Shift-F8</td>
<td>F12</td>
<td>:</td>
<td>:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shift-F5</td>
<td></td>
<td>Home/End</td>
<td>Clear Record</td>
<td>Clear Record</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Shift-Up/Dn</td>
<td></td>
<td>Shift-F8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Prv/Nxt Rec</td>
<td>Up/Down</td>
<td>Clear Field</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Commit Form</td>
<td>Exit System</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>F10</td>
<td>Ctrl-F4</td>
</tr>
</tbody>
</table>

Block Title: Field Data for a Location
Block Table: FIELD_DATA_LOCATION

<table>
<thead>
<tr>
<th>Help</th>
<th>Home/End</th>
<th>Clear Field</th>
<th>Clear Form</th>
<th>Enter Query</th>
<th>Correct Query Fields?</th>
<th>Correct Query Order?</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1</td>
<td>Home/End</td>
<td>F8</td>
<td>Shift-F8</td>
<td>F12</td>
<td>:</td>
<td>:</td>
</tr>
<tr>
<td>F2</td>
<td>Shift-Up/Dn</td>
<td>F8</td>
<td>Shift-F8</td>
<td>F12</td>
<td>:</td>
<td>:</td>
</tr>
<tr>
<td>F3</td>
<td>Prv/Nxt Rec</td>
<td>F8</td>
<td>Shift-F8</td>
<td>F12</td>
<td>:</td>
<td>:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shift-F5</td>
<td></td>
<td>Home/End</td>
<td>Clear Record</td>
<td>Clear Record</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Shift-Up/Dn</td>
<td></td>
<td>Shift-F8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Prv/Nxt Rec</td>
<td>Up/Down</td>
<td>Clear Field</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Commit Form</td>
<td>Exit System</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>F10</td>
<td>Ctrl-F4</td>
</tr>
</tbody>
</table>
Testing of the transaction is performed at four levels:

1. Developer testing.
2. Secondary testing.
3. End user testing.
4. Production release & verification.

As each applicable section of this test plan is completed, the designated individual responsible for the section will sign the plan in the appropriate places. Each check off item will be completed. The status of the transaction will be updated in the data dictionary as the transaction progresses through the development and test steps.

Developer Testing

As each individual transaction is generated, the developer performs tests against the transaction to ensure that it meets specifications and works properly. Upon successful completion of this testing, the transaction is made available for secondary testing.

Test status conditions are:
Secondary Testing

Secondary testing is performed by a person external to the development team. Tests are performed using a standardized test checklist. Initial testing is performed to ensure that the transaction meets the functional requirements of the transaction and satisfies the test plan narrative that follows.

1. Secondary testing in progress.
2. Secondary testing complete, problems found. Resolution in progress.
3. Unable to resolve problem at this time.
4. Problem resolution complete.
5. Secondary testing complete, no problems found.

End User Testing

The transaction is tested by end users for a predetermined time period. This testing is done in the development environment. If no problems are encountered, or all problems are resolved at the end of this time period, the module is ready for Project Manager review.
9 - End User testing in progress.
( ) 10 - Problem found, resolution in progress.
( ) 11 - Problem resolution complete.
   Developer __________________ Date Complete ______
   Tester __________________ Date Complete ______
( ) 12 - Resolution verified.

Production Status

( ) 13 - Ready for Project Manager/System Architect review.
   The Project Manager or System Architect reviews all
test results and determines that the transaction
has completed testing.
   Architect/Manager __________________ Date Complete 5/14/93
( ) 14 - The transaction is ready to be placed into production.
   Software files moved to production directory.
   Transaction added to production menu.
   Transaction access given to production roles.
   Validation test performed in production.
   Production documentation up to date.
( ) 15 - The transaction has been put into production
   By __________________ Date Done 5/1/93

Module Test Plan

( ) Display transaction help. Verify that the narrative adequately
describes the purpose and functions of the transaction in
end-user terms.

( ) Transaction help describes:
   ( ) Purpose of the transaction
   ( ) Functions performed by the transaction
   ( ) Where multiple block, what happens in each block.

Block Title: Sample Authorization
Block Table: SAMPLE_SCHEDULE
Block Usage: Query Only

Block Help

This table is used to query sampling schedule information. It
contains information about the SAP and the SAF that is relevant to
sample scheduling.
Block Test Plan

Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

- Purpose of the block
- Options available in the block
- The relationship of the block to the transaction or to the principal parent block of the transaction
- Navigation to other blocks of the transaction

Where block synchronization is used, ensure that the block data is in sync with the parent block.

Query a single record:

- A single record is retrieved.
- Pressing the F12 key clears the record and permits entering a second query.
- The second query successfully retrieves the desired data.

Query multiple records using wild cards:

- Pressing F12 clears the block and makes the block ready for a query.
- A query composed of a trailing % wildcard retrieves the desired data.
- A query using a prefix % wildcard retrieves the correct data.
- A query using both prefix and suffix % wildcards retrieves the correct data.
- A query using the underscore (_) position wildcard retrieves the correct data.

Verify that the data queries in the block are ordered logically.

Field Prompt: SAP ID
Field Usage: Non Updateable
Field Name: IDENT_SAP

Field Help

This field uniquely identifies the responsible SAP for this sample schedule.
( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.

Field Prompt: Title
Field Usage: Non Updateable
Field Name: TITLE

Field Help
This is a 1-40 character descriptive title for the SAP.

Field Test Plan

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.

Field Prompt: SAF ID
Field Usage: Non Updateable
Field Name: IDENT

Field Help
This field uniquely identifies the SAF for the database. It is entered when the SAF was created in the database.

Field Test Plan

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.
Field Prompt: Date Requested
Field Usage: Queryable Only
Field Name: DATE_REQUESTED

Field Help
---------------------------------------------------------------------
This is the date that HASM requests Mobile Sample Labs to actually take the sample.

Field Test Plan
---------------------------------------------------------------------

(✓) Enter query mode and verify that this field is accessible.
(✓) Enter query mode and enter a valid value in this field.
(✓) Only records matching the entered value should be displayed.
Block Title: Field Data for a Location
Block Table: FIELD_DATA LOCATION
Block Usage: Update Only

Block Help

This table stores basic field data information associated with the taking of a sample. The field data is associated with a specific sample. Subordinate specialized field data information may also be stored.

Block Test Plan

( ) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

( ) Block help describes:

( ) Purpose of the block
( ) Options available in the block
( ) The relationship of the block to the transaction or to the principal parent block of the transaction
( ) Navigation to other blocks of the transaction

( ) Where block synchronization is used, ensure that the block data is in sync with the parent block.

( ) Query a single record:

( ) A single record is retrieved.
( ) Pressing the F12 key clears the record and permits entering a second query.
( ) The second query successfully retrieves the desired data.

( ) Query multiple records using wild cards:

( ) Pressing F12 clears the block and makes the block ready for a query.
( ) A query composed of a trailing % wildcard retrieves the desired data.
( ) A query using a prefix % wildcard retrieves the correct data.
( ) A query using both prefix and suffix % wildcards retrieves the correct data.
( ) A query using the underscore (_) position wildcard retrieves the correct data.

( ) Verify that the data queries in the block are ordered logically.

( ) Update a record:
( ) The change count should increment.
( ) The date updated should become the current date.
( ) An error should occur if the operator owner identifier does
not match the data owner identifier.

( ) Delete a record from the block:
( ) If the record has dependent records, the delete should fail
unless the help text indicates that a cascading delete is
permitted.
( ) Use the clear rcd key (CTRL/F8).
   ( ) For a single record block, the block should clear.
   ( ) For a multi-record block, the record pointed to by the
cursor should clear.
( ) Use the delete key.
   ( ) For a single record block, the block should clear. If
multiple occurrences of the block's table have been
retrieved, the next record in the set should appear in
the block.
   ( ) For a multiple record block, the entry should clear. If
multiple occurrences of the block's table have been
retrieved, the next record in the set should move up to
fill the cleared space.

Field Prompt: Collection Date
Field Usage: Updateable
Field Name: DATE_COLLECT_START

Field Help

The field data collection date field is required.

Enter the field data collection date using the format MM/DD/YY
where:
   MM - is the numeric month of the year
   DD - is the numeric day of the month
   YY - is the numeric value of the year within the
century.

The system will display an error if you enter the data
in any other format.

Field Test Plan

( ) Verify that the field only allows valid dates.
( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.
( ) Skip the field using the TAB key.

Booklet wrong - field required
Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

Delete an existing value. The field should be cleared and stored:

  ( ) Delete the value using the space bar.
  ( ) Delete the value using the clear field key (F8).

Field Prompt: Chain of Custody #
Field Usage: Updateable
Field Name: IDENT_CHAIN_CUSTODY

Field Help

Enter the identifier of the principal chain of custody form for the sample.

This field is optional and may be left empty.

Field Test Plan

( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
  ( ) If autoskip is in effect, cursor will skip to the next field.
  ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
  ( ) Only records matching the entered value should be displayed.

( ) Skip the field using the TAB key.

( ) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

( ) Delete an existing value. The field should be cleared and stored:
  ( ) Delete the value using the space bar.
  ( ) Delete the value using the clear field key (F8).
Field Prompt: Title
Field Usage: Updateable
Field Name: TITLE_LOGBOOK

Field Help

Enter the title of the logbook.

This field is optional and may be left empty.

Field Test Plan

( ) Verify that the field accepts character or numeric data within
the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and
       overlay characters, leaving the last character keyed in the
       last position of the field.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Skip the field using the TAB key.

( ) Enter data into the field, backspace the data out of the field
and TAB to the next field. The database should contain a null
value.

( ) Delete an existing value. The field should be cleared and stored:
   ( ) Delete the value using the space bar.
   ( ) Delete the value using the clear field key (F8).
Field Prompt: Number  
Field Usage: Updateable  
Field Name: NUM_LOGBOOK  

Field Help
-----------------------------------------------------------------------------------

Enter the number of the logbook.
-----------------------------------------------------------------------------------

This data field:
- Is mandatory, it cannot be left empty.

Field Test Plan
-----------------------------------------------------------------------------------

( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Skip the field using the TAB key.

( ) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

( ) Delete an existing value. The field should be cleared and stored:
   ( ) Delete the value using the space bar.
   ( ) Delete the value using the clear field key (F8).
Field Prompt: Page
Field Usage: Updateable
Field Name: NUM_LOG_PAGE

Field Help
This field contains the page number within the log book in which sample field data information is recorded.

This data field:
- Is mandatory, it cannot be left empty.
- Must contain a numeric value.

Field Test Plan

( ) Attempt to store alphabetic characters in the field. An error should result.

( ) Begin the field entry with a space. An error should result.

( ) Attempt to enter a longer data value than allowed.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Attempt to enter a decimal value. An error should occur.

( ) Skip the field using the TAB key.

( ) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

( ) Delete an existing value. The field should be cleared and stored:
   ( ) Delete the value using the space bar.
   ( ) Delete the value using the clear field key (F8).

---
Field Prompt: Clarity
Field Usage: Updateable
Field Name: SAMPLE_CLARITY

Field Help

Enter the clarity of the sample. LOV available. Entering the first
three characters of the clarity will allow the rest of the clarity
word to be automatically entered.

This field is optional and may be left empty.

Field Test Plan

( ) Verify that the field accepts character or numeric data within
the limits imposed by validation criteria.
( ) Enter data beyond the length of the field:
    ( ) If autoskip is in effect, cursor will skip to the next field.
    ( ) If no autoskip, cursor will remain at the end of the field and
overlay characters, leaving the last character keyed in the
last position of the field.
( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
    ( ) Only records matching the entered value should be displayed.
( ) Skip the field using the TAB key.
( ) Enter data into the field, backspace the data out of the field
and TAB to the next field. The database should contain a null
value.
( ) Delete an existing value. The field should be cleared and stored:
    ( ) Delete the value using the space bar.
    ( ) Delete the value using the clear field key (F8).
( ) Test LOV:
    ( ) Select the first entry in the LOV.
    ( ) Select the last entry in the LOV.
    ( ) Use the FIND option and select an entry.
Field Prompt: Color
Field Usage: Updateable
Field Name: SAMPLE_COLOR

Field Help

Enter the color of the sample. LOV available. You may enter the first three characters of the color and the remainder of the color word will be entered automatically.

This field is optional and may be left empty.

Field Test Plan

1. Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

2. Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

3. Enter query mode and verify that this field is accessible.

4. Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

5. Skip the field using the TAB key.

6. Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

7. Delete an existing value. The field should be cleared and stored:
   ( ) Delete the value using the space bar.
   ( ) Delete the value using the clear field key (F8).

8. Test LOV:
   ( ) Select the first entry in the LOV.
   ( ) Select the last entry in the LOV.
   ( ) Use the FIND option and select an entry.
Field Prompt: Temperature
Field Usage: Updateable
Field Name: SAMPLE_TEMPERATURE

Field Help

Enter the temperature of the sample.

This field is optional and may be left empty.

Field Test Plan

( ) Attempt to store alphabetic characters in the field. An error should result.
( ) Begin the field entry with a space. An error should result.
( ) Attempt to enter a longer data value than allowed.
( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.
( ) Attempt to store decimal data. Data to the limit of the decimal places provided by the field definition will be allowed.
   ( ) Help for the field should identify the number of decimal places allowed.
   ( ) Store a data value without decimal. The value should be zero to the right of the decimal place.
   ( ) Store a single digit decimal value.
   ( ) Store a decimal value to the maximum number of allowed decimal positions.
   ( ) Store a decimal value greater than the maximum number of allowed decimal positions. An error should occur.
( ) Skip the field using the TAB key.
( ) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.
( ) Delete an existing value. The field should be cleared and stored:
   ( ) Delete the value using the space bar.
   ( ) Delete the value using the clear field key (F8).
Field Prompt: Conductivity
Field Usage: Updateable
Field Name: CONDUCTIVITY

Field Help
------------------------------------------------------------------------------------------------------------------
Enter the conductivity of the sample.

This data field:
- Is optional and may be left empty.
- May contain any character combination.

Field Test Plan
------------------------------------------------------------------------------------------------------------------
(✓) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

(✓) Enter data beyond the length of the field:
   (✓) If autoskip is in effect, cursor will skip to the next field.
   (✓) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.
   (✓) Only records matching the entered value should be displayed.

(✓) Skip the field using the TAB key.

(✓) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

(✓) Delete an existing value. The field should be cleared and stored:
   (✓) Delete the value using the space bar.
   (✓) Delete the value using the clear field key (F8).
Field Prompt: Ph
Field Usage: Updateable
Field Name: PH

Field Help

Enter the PH level for the sample.
This data field:
- Is optional and may be left empty.
- Must contain a numeric value.

Field Test Plan

(1) Attempt to store alphabetic characters in the field. An error should result.

(2) Begin the field entry with a space. An error should result.

(3) Attempt to enter a longer data value than allowed.

(4) Enter query mode and verify that this field is accessible.

(5) Enter query mode and enter a valid value in this field.

(6) Only records matching the entered value should be displayed.

(7) Attempt to enter a decimal value. An error should occur.

(8) Skip the field using the TAB key.

(9) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

(10) Delete an existing value. The field should be cleared and stored:

   (a) Delete the value using the space bar.
   (b) Delete the value using the clear field key (F8).
Block Title: Sample
Block Table: SAMPLE
Block Usage: Full Function

Block Help

This block shows the list of samples that have been defined for this sample request. Each sample may be for a different location, and have a different purpose (ie Primary, Blank, Dup).

Block Test Plan

( ) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

( ) Block help describes:

( ) Purpose of the block
( ) Options available in the block
( ) The relationship of the block to the transaction or to the principal parent block of the transaction
( ) Navigation to other blocks of the transaction

( ) Where block synchronization is used, ensure that the block data is in sync with the parent block.

( ) Query a single record:

( ) A single record is retrieved.
( ) Pressing the F12 key clears the record and permits entering a second query.
( ) The second query successfully retrieves the desired data.

( ) Query multiple records using wild cards:

( ) Pressing F12 clears the block and makes the block ready for a query.
( ) A query composed of a trailing % wildcard retrieves the desired data.
( ) A query using a prefix % wildcard retrieves the correct data.
( ) A query using both prefix and suffix % wildcards retrieves the correct data.
( ) A query using the underscore (_) position wildcard retrieves the correct data.

( ) Verify that the data queries in the block are ordered logically.

( ) Store a series of records using the F6 [duplicate record] key to carry forward field values from the previously stored record.
(✓) Attempting to store the duplicated record without change should result in an error.
(✓) Change key fields and store the record. It should store successfully.

(✓) Update a record:
(✓) The change count should increment.
(✓) The date updated should become the current date.
(✓) An error should occur if the operator owner identifier does not match the data owner identifier.

(✓) Delete a record from the block:
(✓) If the record has dependent records, the delete should fail unless the help text indicates that a cascading delete is permitted.
(✓) Use the clear rcd key (CTRL/F8).
(✓) For a single record block, the block should clear.
(✓) For a multi-record block, the record pointed to by the cursor should clear.
(✓) Use the delete key.
(✓) For a single record block, the block should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should appear in the block.
(✓) For a multiple record block, the entry should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should move up to fill the cleared space.

Field Prompt: HEIS Number
Field Usage: Updateable
Field Name: IDENT_SAMPLE

Field Help
This field uniquely identifies the sample to the database.
An error will occur if you attempt to enter a identification value already present in the database.

These records are automatically created with a temporary Sample ID. When the field data is entered, the HEIS number will be entered as the Sample ID.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan
(✓) Verify that the field accepts character or numeric data within
Field Test Plan

- Enter data beyond the length of the field:
  - If autoskip is in effect, cursor will skip to the next field.
  - If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

- Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

- Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.

- Change the field, committing after each change:
  - Change the field where a range of valid values exists:
    - Value below valid range should display message COM00101 or COM00103 (if no LOV).
    - Value above valid range should display message COM00101 or COM00103 (if no LOV).
    - Minimum value within the range should be accepted.
    - Maximum value within the range should be accepted.
    - Random value within the range should be accepted.

- Enter query mode and verify that this field is accessible.

- Enter query mode and enter a valid value in this field.
  - Only records matching the entered value should be displayed.

- Attempt to delete an existing data field value. An error should result when <F10> or <Enter> are pressed.
  - Use the space bar to attempt to delete the field data.
  - Use clear field (F8) to attempt to delete the field data.

- Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.

- Enter a duplicate value. An error should occur.

- From LOV, select a value already present in the database. An error should occur.
Field Prompt: Pur
Field Usage: Updateable
Field Name: SAMP_PURPOSE

Field Help
-----------------------------------------------------
This field defines the purpose for this sample. List of values is available.
-----------------------------------------------------
This data field:
- All data is converted to upper case.
- Provides a default value. To accept the default value press the ENTER or TAB key.
- Must contain a valid value. Blank is not allowed.

Field Test Plan
-----------------------------------------------------

( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
   ( ) Change the field, committing after each change.
   ( ) Change the field where a range of valid values exists:
      ( ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
      ( ) Value above valid range should display message COM00101 or COM00103 (if no LOV).
      ( ) Minimum value within the range should be accepted.
      ( ) Maximum value within the range should be accepted.
      ( ) Random value within the range should be accepted.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Skip the field using the TAB key.
Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

Delete an existing value. The field should be cleared and stored:
   ( ) Delete the value using the space bar.
   ( ) Delete the value using the clear field key (F8).

Test LOV:
   ( ) Select the first entry in the LOV.
   ( ) Select the last entry in the LOV.
   ( ) Use the FIND option and select an entry.

Field Prompt: pose
Field Usage: Queryable Only
Field Name: DESCRIPTION

Field Help

Enter the 1 - 30 character description of the sample purpose code.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.
WHC-SD-WM-TP-169 REV 0

( ) Attempting to store the duplicated record without change should result in an error.
( ) Change key fields and store the record. It should store successfully.
( ) Update a record:
  ( ) The change count should increment.
  ( ) The date updated should become the current date.
  ( ) An error should occur if the operator owner identifier does not match the data owner identifier.
( ) Delete a record from the block:
  ( ) If the record has dependent records, the delete should fail unless the help text indicates that a cascading delete is permitted.
  ( ) Use the delete key.
    ( ) For a single record block, the block should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should appear in the block.
    ( ) For a multiple record block, the entry should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should move up to fill the cleared space.

Field Prompt: Lab
Field Usage: Updateable
Field Name: IDENT_LAB

Field Test Plan

( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
  ( ) If autoskip is in effect, cursor will skip to the next field.
  ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
  ( ) Change the field, committing after each change.
  ( ) Change the field where a range of valid values exists:
    ( ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
    ( ) Value above valid range should display message COM00101 or
COM00103 (if no LOV).

( ) Minimum value within the range should be accepted.
( ) Maximum value within the range should be accepted.
( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.
( ) Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.
( ) Enter a duplicate value. An error should occur.

( ) Use LOV to enter a value.

Field Prompt: HEIS\Number
Field Usage: Updateable
Field Name: IDENT\SAMPLE

Field Help
This field uniquely identifies the sample to the database.
An error will occur if you attempt to enter a identification value already present in the database.
These records are automatically created with a temporary Sample ID.
When the field data is entered, the HEIS number will be entered as the Sample ID.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan
( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
( ) If autoskip is in effect, cursor will skip to the next field.
( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after
Programmer's Bug Report

Application: LEMIS
Transaction: LE3310U1 Enter Field Data

Comment ID : 1046  Priority: LOW  Date: 29-APR-93
----------------------------------------
Status : HANDLED  Date: 04-MAY-93  Class: PROBLEM
----------------------------------------
Assigned To:  TODD ADAMS
Entered By :  LORRAINE CAMPBELL
System ID :  Oracle ROWID: 000001E9.0002.0009
Last Error :  -0
Last Msg :  FRM-40353 Query cancelled.
Table :  SAMPLE
Block :  SAMPLE
Field :  SAMPLE.DSP_IDENT LAB

DESCRIPTION
----------------------------------------
no field help available. No testing for lab in booklet

CORRECTIVE ACTION
----------------------------------------
04-May-93 - Fixed. Added field help for lab. Added test plan for laboratory field in test booklet.
Programmer's Bug Report

Application: LEMIS  Liquid Effluent Monitoring Information System

Transaction: LE3310U1 Enter Field Data

-----------------------------

Comment ID : 1041  Priority: LOW  Date: 29-APR-93

Status : HANDLED  Date: 03-MAY-93  Class: PROBLEM
Type: PROBLEM
Assigned To: TODD ADAMS
Entered By: LORRAINE CAMPBELL
System ID: 92000011309  Oracle ROWID: 000001B6.0003.0009
Last Error: -0
Last Msg: FRM-40200 Field is protected against update.
Table: FIELD_DATA_LOCATION
Block: FLDDAT
Field: FLDDAT_DSP_TITLE_LOCATOR

DESCRIPTION

Cannot delete a record from this block.

CORRECTIVE ACTION

03-May-93 - Not a problem. Should not be able to delete records in this block.

245
Application: LEMIS

Programmer's Bug Report

Transaction: LE3310U1 Enter Field Data

Comment ID: 1042  Priority: LOW  Date: 29-APR-93

Status: HANDLED  Date: 03-MAY-93  Class:

Type: PROBLEM

Assigned To: TODD ADAMS

Entered By: LORRAINE CAMPBELL

System ID: 92000011309  Oracle ROWID: 000001B6.0003.0009

Last Error: -0

Last Msg: FRM-40400  Transaction complete -- 1 records posted an

Table: FIELD_DATA_LOCATION

Block: FLDDAT

Field: FLDDAT.NUM_LOG_PAGE

DESCRIPTION

Field accepted a decimal value. help does not clarify what the valid values should be

CORRECTIVE ACTION

03-May-93 - Fixed. Modified field to integer.
Programmer's Bug Report

Application: LEMIS Liquid Effluent Monitoring Information System

Transaction: LE3310U1 Enter Field Data

<table>
<thead>
<tr>
<th>Comment ID: 1043</th>
<th>Priority: LOW</th>
<th>Date: 29-APR-93</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>HANDLED</td>
<td></td>
</tr>
<tr>
<td>Type</td>
<td>PROBLEM</td>
<td></td>
</tr>
<tr>
<td>Assigned To</td>
<td>TODD ADAMS</td>
<td></td>
</tr>
<tr>
<td>Entered By</td>
<td>LORRAINE CAMPBELL</td>
<td></td>
</tr>
<tr>
<td>System ID</td>
<td>92000011309</td>
<td>Oracle ROWID: 000001B6.0003.0009</td>
</tr>
<tr>
<td>Last Error</td>
<td>-0</td>
<td></td>
</tr>
<tr>
<td>Last Msg</td>
<td>FRM-40400 Transaction complete -- 1 records posted an</td>
<td></td>
</tr>
<tr>
<td>Table</td>
<td>FIELD_DATA_LOCATION</td>
<td></td>
</tr>
<tr>
<td>Block</td>
<td>FLDDAT</td>
<td></td>
</tr>
<tr>
<td>Field</td>
<td>FLDDAT.SAMPLE_TEMPERATURE</td>
<td></td>
</tr>
</tbody>
</table>

DESCRIPTION

help does not state number of decimal places allowed

CORRECTIVE ACTION

03-May-93 - Fixed. Modified help.
Transaction: LE3310U1 Enter Field Data

Comment ID: 1044  Priority: LOW  Date: 29-APR-93

Status: HANDLED  Date: 03-MAY-93  Class:
Type: PROBLEM
Assigned To: TODD ADAMS
Entered By: LORRAINE CAMPBELL
System ID: 92000011309  Oracle ROWID: 000001B6.0003.0009

Last Error: -0
Last Msg: FRM-50016 Legal characters are 0-9 - + E.
Table: FIELD DATA_LOCATION
Block: FLDDAT
Field: FLDDAT.PH

DESCRIPTION

booklet states an error will occur if field begins with a space. no error was given, number just moved to left to start field

CORRECTIVE ACTION

Programmer's Bug Report

Application: LEMIS

Transaction: LE3310U1 Enter Field Data

-------------------------------

Comment ID : 1045  Priority: LOW  Date: 29-APR-93

-------------------------------

Status : HANDLED  Date: 03-MAY-93  Class: PROBLEM
Type   : FRM-40400  Transaction complete -- 1 records posted an

Assigned To: TODD ADAMS
Entered By : LORRAINE CAMPBELL

System ID : 92000011309  Oracle ROWID: 000001B6.0003.0009
Last Error : -0
Last Msg  : FIELD DATA LOCATION
Table     : FLDDAT
Block     : FLDDAT
Field     : FLDDAT.PH

-------------------------------

DESCRIPTION

a decimal was allowed. booklet states an error should have occurred

-------------------------------

CORRECTIVE ACTION

03-May-93 - Fixed. Modified field to display error if decimal is entered.

249
Programmer's Bug Report

Application: LEMIS
Liquid Effluent Monitoring Information System

Transaction: LE3310U1 Enter Field Data

----------------------------------
Comment ID: 1060   Priority: LOW   Date: 04-MAY-93
Type: PROBLEM
Assigned To: TODD ADAMS
Entered By: LORRAINE CAMPBELL
System ID:       Oracle ROWID: 000001E9.0002.0009
Last Error:     -0
Last Msg: FRM-40400 Transaction complete -- 1 records posted an
Table: SAMPLE
Block: SAMPLE
Field: SAMPLE.DSP_IDENT_LAB

DESCRIPTION
----------------------------------
problem with lab. For a new record list of values is available and
there is data in it. When pressing F8 then selecting F9 on an
existing record there are no entries in the LOV

CORRECTIVE ACTION
----------------------------------
06-May-93 - Fixed. Took out code that limited lab choices to sample
purpose.

OK
Transaction: LE3310U1 Enter Field Data

Comment ID: 1061  Priority: LOW  Date: 04-MAY-93

Status: ASSIGNED  Date: 04-MAY-93  Class: PROBLEM
Assigned To: TODD ADAMS
Entered By: LORRAINE CAMPBELL
System ID: Oracle ROWID:
Last Error: F-RM-40353: Query cancelled.
Table: SAMPLE
Block: SAMPLE
Field: SAMPLE_IDENT_SAMPLE

DESCRIPTION

query does not work for Lab
Transaction: LE3310U1 Enter Field Data

Status: HANDLED  Date: 06-MAY-93  Class: ADAMS
Type: PROBLEM
Assigned To: TODD ADAMS
Entered By: LORRAINE CAMPBELL
System ID: Oracle ROWID: 000001E9.0002.0009
Last Error: -0
Last Msg: FRM-40400  Transaction complete -- 1 records posted an
Table: SAMPLE
Block: SAMPLE
Field: SAMPLE.DSP_IDENT_LAB

DESCRIPTION
-------------------------------------------------------------------
incorrect error msg when trying to leave field blank

CORRECTIVE ACTION
-------------------------------------------------------------------
06-May-93 - Fixed.
LEMIS Module Test Checklist Report

Name: ENTER CONSTITUENT RESULTS

Short Name: LE4100U1
Purpose: Manually enter results information.

Initial Test Date: 4/4/93
Verification Date: 4/8/93

Module Description

This module is used to verify results data by allowing for the entry of a certain percentage of the initial data. A verification report is run against this data to determine if the verification data matches the real data.

Module Help

This transaction is used to verify previously loaded data by allowing the user to enter a certain percentage of the data.

The form is two pages long and consists of three blocks.

To enter validation data:
1) Enter the HEIS number and press <shift-F12>. The associated laboratory will appear.
2) Press <Page Down> to create Results of Sample Analysis Records in the following block. Your cursor will be positioned in the METHOD field.
3) Enter the Method identifier. Use LOV <shift-F9> for a valid list of methods to select from. If you know the numeric portion of the method, you may type that in and press tab. The full method id will be filled in for you. (For instance: for method SW-846 9040, you can type 9040 and the rest of the method identifier will be
Module Help

entered when you leave the field.

4) Enter the Date Extracted and Date Analysis. Both of these fields are optional.

5) Press the <Page Down> key to move to page 2 of the form where you will find the associated constituents for the method that you chose on page 1. Your cursor will be in the CAS Id field.

6) Enter the CAS Id or press LOV <shift-F9> for a valid list of constituents to chose from. Press <Tab> and the Constituent Full Name will be filled in and the cursor will move to the next field.

7) Enter the Concentration Value and press <Tab> to move to the next field.

8) The Unit of Measure field will contain a default value. You may leave it as it is or change it. A LOV (list of values) is available by pressing <F9>. Press tab to move to the next field.

9) The Qualifier field is defaulted to "UJ". You may leave it as it is or change it by entering a valid value or pressing <F9> for the list of values.

10) Use <Down arrow> to move to the next constituent record. Repeat steps 6-10 to enter more constituents.

11) Press <F10> to commit your changes.

UNIT TEST CHECKLIST

(✓) Module  Function Key

- Show Version : Shift-F10 :
- Comment/Bug : Shift-F3 :
- Fast Access : F5 :
- Back : F4 or Esc :
- Main Menu : Shift-F4 :
- Key Template : Ctrl-F1 :
- Context Prnt : F11 :
- Query Prnt : Ctrl-F11 :
- Oracle Prnt : Shift-F11 :

(✓) Block Title: Sample
Block Table: SAMPLE

- Help : F1 :
- Key Help : Shift-F1 :
- Online Doc : F2 :
- Dis Journal : Shift-F2 :
- Related Data : F3 :
- Edit Text : F7 :
- Spec Func 1 : Shift-F5 :
- Spec Func 2 : Ctrl-F5 :
- Home/End : Home/End :
- Prv/Nxt Block : PgDn/PgUp:
- Scroll Up/Dn : Shift-Up/Dn:
- Prv/Nxt Field : Tab/Sh-Tb:
- Prv/Nxt Rec : Up/Down:
- Commit Form : F10 :
- Clear Field : F8 :
- Clear Record : Shift-F8 :
- Exit System : Ctrl-F4 :

254
( ) Block Title: Sample
Block Table: SAMPLE

- Enter Query : F12
- Correct Query Fields? : Ctrl-F12
- Execute Qry : Shift-F12
- Help : F1
- Online Doc : F2
- Related Data : F3
- Spec Func 1 : Shift-F5
- Spec Func 2 : Ctrl-F5

- Home/End : Home/End
- Scroll Up/Down : Shift-Up/Down
- Prv/Nxt Rec : Up/Down
- Clear Field : F8
- Clear Form : Shift-F8
- Enter Query : F12
- Correct Query Fields? : Ctrl-F12
- Execute Qry : Shift-F12
- Insert Rec : Insert
- Add record at end
- Mandatory checks OK? : Validation checks OK?
- List of Values OK? : Duplicate Fld: Shift-F6
- Duplicate Rec: F6
- Duplicate checks OK?
- Optional fields marked? : Correct fields uppercase

( ✓ ) Block Title: Results of Sample Analysis
Block Table: RESULTS

- Count Query : Ctrl-F12
- Uppercase and LOVs?
- Correct Query Order? :
- Key Help : Shift-F1
- Dis Journal : Shift-F2
- Edit Text : F7
- Spec Func 2 : Ctrl-F5
- Prv/Nxt Block: PgDn/PgUp
- Prv/Nxt Field: Tab/Sh-Tb
- Commit Form : F10
- Clear Record : Shift-F8
- Exit System : Ctrl-F4
- Correct Query Order? :
TEST PLAN

Testing of the transaction is performed at four levels:

1. Developer testing.
2. Secondary testing.
3. End user testing.
4. Production release & verification.

As each applicable section of this test plan is completed, the designated individual responsible for the section will sign the plan in the appropriate places. Each check off item will be completed. The status of the transaction will be updated in the data dictionary as the transaction progresses through the development and test steps.

Test status conditions are:

Developer Testing

As each individual transaction is generated, the developer performs tests against the transaction to insure that it meets specifications and works properly. Upon successful completion of this testing, the transaction is made available for secondary testing.

Test status conditions are:
1 - Transaction under development, untested.
2 - Development complete, initial unit testing in progress.
3 - Initial unit testing complete.
4 - Secondary testing in progress.
5 - Secondary testing complete, problems found. Resolution in progress.
6 - Unable to resolve problem at this time.
7 - Problem resolution complete.
8 - Secondary testing complete, no problems found.

Secondary Testing

Secondary testing is performed by a person external to the development team. Tests are performed using a standardized test checklist. Initial testing is performed to ensure that the transaction meets the functional requirements of the transaction and satisfies the test plan narrative that follows.

When problems are found:
1. The tester passes the checklist to the project manager for review and action.
2. The project manager assigns the checklist to the developer of the transaction for correction of the problems.
3. The developer corrects the described problems, records the corrective actions taken and the number of hours of corrective effort used, tests the transaction for correct operation, and returns the checklist to the project manager.
4. The project manager returns the checklist to the tester for retesting.

The above sequence of events repeats until the tester signs off the transaction as passing the test requirements.

End User Testing

The transaction is tested by end users for a predetermined time period. This testing is done in the development environment. If no problems are encountered, or all problems are resolved at the end of this time period, the module is ready for Project Manager review.
9 - End User testing in progress.
10 - Problem found, resolution in progress.
11 - Problem resolution complete.
12 - Resolution verified.
Developer __________________ Date Complete _________
Tester __________________ Date Complete _________

Production Status
13 - Ready for Project Manager/System Architect review.
   ( ) The Project Manager or System Architect reviews all test results and determines that the transaction has completed testing.
Architect/Manager __________________ Date Complete 3/1/93

14 - The transaction is ready to be placed into production.
   ( ) Software files moved to production directory.
   ( ) Transaction added to production menu.
   ( ) Transaction access given to production roles.
   ( ) Validation test performed in production.
   ( ) Production documentation up to date.
By __________________ Date Done 3/1/93

Module Test Plan

( ) Display transaction help. Verify that the narrative adequately describes the purpose and functions of the transaction in end-user terms.
( ) Transaction help describes:
   ( ) Purpose of the transaction
   ( ) Functions performed by the transaction
   ( ) Where multiple block, what happens in each block.

Block Title: Sample
Block Table: SAMPLE
Block Usage: Query Only

Block Help
This block shows the list of samples that have been defined for this sample request. Each sample may be for a different location, and have a different purpose (ie Primary, Blank, Dup).
Block Test Plan

Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

Block help describes:

- Purpose of the block
- Options available in the block
- The relationship of the block to the transaction or to the principal parent block of the transaction
- Navigation to other blocks of the transaction

Where block synchronization is used, ensure that the block data is in sync with the parent block.

Query a single record:

- A single record is retrieved.
- Pressing the F12 key clears the record and permits entering a second query.
- The second query successfully retrieves the desired data.

Query multiple records using wild cards:

- Pressing F12 clears the block and makes the block ready for a query.
- A query composed of a trailing % wildcard retrieves the desired data.
- A query using a prefix % wildcard retrieves the correct data.
- A query using both prefix and suffix % wildcards retrieves the correct data.
- A query using the underscore (_) position wildcard retrieves the correct data.

Verify that the data queries in the block are ordered logically.

Field Prompt: HEIS Number
Field Usage: Non Updateable
Field Name: IDENT_SAMPLE
Field Help

This field uniquely identifies the sample to the database.
An error will occur if you attempt to enter a identification value already present in the database.
These records are automatically created with a temporary Sample ID.
When the field data is entered, the HEIS number will be entered...
Field Help

as the Sample ID.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

(✓) Enter query mode and verify that this field is accessible.

✓ Enter query mode and enter a valid value in this field.
   (✓) Only records matching the entered value should be displayed.

✓ Enter a duplicate value. An error should occur.

✓ From LOV, select a value already present in the database. An error should occur.

Field Prompt: Purpose
Field Usage: Queryable Only
Field Name: DESCRIPTION

Field Help

Enter the 1 - 30 character description of the sample purpose code.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

✓ Enter query mode and verify that this field is accessible.

✓ Enter query mode and enter a valid value in this field.
   (✓) Only records matching the entered value should be displayed.
Block Title: Results of Sample Analysis
Block Table: RESULTS
Block Usage: Full Function

This table is used to store the header information for the results of the methods performed on a sample. It is used to store information that applies to all of the constituents tested for by a method.

Block Test Plan

Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

( ) Purpose of the block
( ) Options available in the block
( ) The relationship of the block to the transaction or to the principal parent block of the transaction
( ) Navigation to other blocks of the transaction

Where block synchronization is used, ensure that the block data is in sync with the parent block.

( ) Query a single record:

( ) A single record is retrieved.
( ) Pressing the F12 key clears the record and permits entering a second query.
( ) The second query successfully retrieves the desired data.

( ) Query multiple records using wild cards:

( ) Pressing F12 clears the block and makes the block ready for a query.
( ) A query composed of a trailing % wildcard retrieves the desired data.
( ) A query using a prefix % wildcard retrieves the correct data.
( ) A query using both prefix and suffix % wildcards retrieves the correct data.
( ) A query using the underscore (_) position wildcard retrieves the correct data.

( ) Verify that the data queries in the block are ordered logically.

( ) Store a series of records using the F6 [duplicate record] key to carry forward field values from the previous stored record.
( ) Attempting to store the duplicated record without change
should result in an error.
( ) Change key fields and store the record. It should store
successfully.
( ) Update a record:
( ) The change count should increment.
( ) The date updated should become the current date.
( ) An error should occur if the operator owner identifier does
not match the data owner identifier.

Field Prompt: Extract
Field Usage: Updateable
Field Name: DATE_EXTRACTED

Field Help
Enter the date the sample was extracted.
This field:

- Is optional and may be left empty.
- Must use the following structure: MM/DD/YY where

- MM = the number of the Month.
- DD = the number of the day.
- YY = the two-digit number of the year, eg. ('92' = '1992')

Field Test Plan

( ) Verify that the field only allows valid dates.
( ) Display column help. Verify that the narrative adequately
describes the column's purpose and functions in end-user terms.
( ) Change the field in an existing record. Verify that the change
occurred by displaying the record on the screen before and after
the changes were made.
( ) Change the field, committing after each change.
( ) Change the field where a range of valid values exists:
   ( ) Value below valid range should display message COM00101 or
   COM00103 (if no LOV).
   ( ) Value above valid range should display message COM00101 or
   COM00103 (if no LOV).
   ( ) Minimum value within the range should be accepted.
   ( ) Maximum value within the range should be accepted.
   ( ) Random value within the range should be accepted.
( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
Only records matching the entered value should be displayed.

Skip the field using the TAB key.

Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

Delete an existing value. The field should be cleared and stored:

- Delete the value using the space bar.
- Delete the value using the clear field key (F8).
Field Prompt: Analysis  
Field Usage: Updateable  
Field Name: DATE_ANALYSIS

Field Help  
Enter the date the analysis was performed on the sample. 
This field:
- Is optional and may be left empty.  
- Must use the following structure: MM/DD/YY where 

MM = the number of the month. 
DD = the number of the day. 
YY = the two-digit number of the year, e.g. '92' = '1992'.

Field Test Plan

(/) Verify that the field only allows valid dates.  
(/) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.  
(/) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.  
(/) Change the field, committing after each change.  
(/) Change the field where a range of valid values exists:  
( /) Value below valid range should display message COM00101 or COM00103 (if no LOV).  
( /) Value above valid range should display message COM00101 or COM00103 (if no LOV).  
( /) Minimum value within the range should be accepted.  
( /) Maximum value within the range should be accepted.  
( /) Random value within the range should be accepted.  
(/) Enter query mode and verify that this field is accessible.  
(/) Enter query mode and enter a valid value in this field.  
( /) Only records matching the entered value should be displayed.  
(/) Skip the field using the TAB key.  
(/) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.  
(/) Delete an existing value. The field should be cleared and stored.
Delete the value using the space bar.
Delete the value using the clear field key (F8).
Field Prompt: Units  
Field Usage: Updateable  
Field Name: CONCENTRATION_UNITS

Field Help

This field is the concentration units for the constituent data associated with this results record. List of values available.

This data field:
- May contain any character combination
- All input is converted to upper case.

Field Test Plan

(✓) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.
(✓) Enter data beyond the length of the field:
   (/) If autoskip is in effect, cursor will skip to the next field.
   (/) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.
(✓) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.
(✓) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
(✓) Change the field, committing after each change.
(✓) Change the field where a range of valid values exists:
   (✓) Value below valid range should display message COM00101 or COM00103 (if no LOV).
   (✓) Value above valid range should display message COM00101 or COM00103 (if no LOV).
   (✓) Minimum value within the range should be accepted.
   (✓) Maximum value within the range should be accepted.
   (✓) Random value within the range should be accepted.
(✓) Enter query mode and verify that this field is accessible.
(✓) Enter query mode and enter a valid value in this field.
   (✓) Only records matching the entered value should be displayed.
(✓) Accept the default.
(✓) Modify each default value with a valid alternative.
(✓) Modify each default value with an invalid alternative.
(1) Skip the field using the TAB key.

(1) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

(1) Delete an existing value. The field should be cleared and stored:

(1) Delete the value using the space bar.
(1) Delete the value using the clear field key (F8).

Test LOV:

(1) Select the first entry in the LOV.
(1) Select the last entry in the LOV.
(1) Use the FIND option and select an entry.
Field Prompt: Text?
Field Usage: Queryable Only
Field Name: FLAG_TEXT

Field Help

This field is a flag that identifies the presence of additional textual information about the data item. If "N" is displayed, no text is currently present. If "Y" is displayed, text of one or more types is present. To enter or display text, press F7. A popup screen will display the default text type for the data item. If this default text type is the one you want, you may either read or add text. If you want to use another available text type for the data item, press LOV (F9) to display and select the desired text type. Once you have entered any text into the database, the indicator flag for the data item will be set to "Y".

Field Test Plan

( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.
( ) Test LOV:
  ( ) Select the first entry in the LOV.
  ( ) Select the last entry in the LOV.
  ( ) Use the FIND option and select an entry.
( ) Press the TEXT key (F7). The text popup should be displayed.
( ) With the cursor at the text type, press LOV (F9). Where available, a list of other text types available for the entry will be displayed. Select one text type for testing.
( ) Press the ENTER key to move the cursor to the text block.
( ) Enter two lines of text. The cursor should automatically move to the next line when one line is full.
( ) Press the COMMIT key (F10). Press ENTER in response to prompt
until the popup disappears and the primary screen reappears.

( ) The text flag should be set to 'Y'.

( ) Select and update text that already exists.
Block Title: Constituents Found In Results
Block Table: CONSTITUENT RESULTS
Block Usage: Full Function

Block Help

This table contains the analytical results for one constituent for a specific sample as determined by the analytical laboratory that performed the analysis.

Block Test Plan

( ) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

( ) Block help describes:

( ) Purpose of the block
( ) Options available in the block
( ) The relationship of the block to the transaction or to the principal parent block of the transaction
( ) Navigation to other blocks of the transaction

( ) Where block synchronization is used, ensure that the block data is in sync with the parent block.

( ) Query a single record:

( ) A single record is retrieved.
( ) Pressing the F12 key clears the record and permits entering a second query.
( ) The second query successfully retrieves the desired data.

( ) Query multiple records using wild cards:

( ) Pressing F12 clears the block and makes the block ready for a query.
( ) A query composed of a trailing % wildcard retrieves the desired data.
( ) A query using a prefix % wildcard retrieves the correct data.
( ) A query using both prefix and suffix % wildcards retrieves the correct data.
( ) A query using the underscore (_) position wildcard retrieves the correct data.

( ) Verify that the data queries in the block are ordered logically.

( ) Store a series of records using the F6 [duplicate record] key to carry forward field values from the previously stored record.
✓ Attempting to store the duplicated record without change should result in an error.

✓ Change key fields and store the record. It should store successfully.

✓ Update a record:
   ✓ The change count should increment.
   ✓ The date updated should become the current date.
   ✓ An error should occur if the operator owner identifier does not match the data owner identifier.

✓ Down arrow through the list of constituents.
   ✓ The Qualifier field should automatically update to 'UJ'.

( ) Try to blank out the Qualifier field for one of the constituent records. Press the commit key. Then down arrow through the list of constituents and then up arrow back to the constituent that was blanked out.

( ) The Qualifier field should be automatically set back to 'UJ'.

Field Prompt: CAS Id
Field Usage: Queryable Only
Field Name: IDENT_CAS

Field Help
-----------------------------------------------------
This data field:
- May contain any character combination.
- All input is converted to upper case.

Field Test Plan
-----------------------------------------------------
( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ✓ Only records matching the entered value should be displayed.

✓ Enter a duplicate value. An error should occur.

( ) From LOV, select a value already present in the database. An error should occur.
Field Prompt: Full Name
Field Usage: Queryable Only
Field Name: NAME_CON_LONG

Field Help
- Is optional and may be left empty.
- May contain any character combination.
- All input is converted to upper case.

Field Test Plan
- Enter query mode and verify that this field is accessible.
- Enter query mode and enter a valid value in this field. Only records matching the entered value should be displayed.
- Enter a duplicate value. An error should occur.
- From LOV, select a value already present in the database. An error should occur.
Field Prompt: Conc Value
Field Usage: Updateable
Field Name: CONC_VALUE

Field Help

Enter the concentration value for the constituent. This field only allows three decimal places.

This field:
- Is optional and may be left empty.
- Must contain a numeric value - 0-9, ',', or '-'

Field Test Plan

(✓) Attempt to store alphabetic characters in the field. An error should result.
(✓) Begin the field entry with a space. An error should result.
(✓) Attempt to enter a longer data value than allowed.
(✓) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

(✓) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
(✓) Change the field, committing after each change.
(✓) Change the field where a range of valid values exists:
   (✓) Value below valid range should display message COM00101 or COM00103 (if no LOV).
   (✓) Value above valid range should display message COM00101 or COM00103 (if no LOV).
   (✓) Minimum value within the range should be accepted.
   (✓) Maximum value within the range should be accepted.
   (✓) Random value within the range should be accepted.

(✓) Enter query mode and verify that this field is accessible.
(✓) Enter query mode and enter a valid value in this field.
(✓) Only records matching the entered value should be displayed.

(✓) Attempt to store decimal data. Data to the limit of the decimal places provided by the field definition will be allowed.
(✓) Help for the field should identify the number of decimal places allowed.
(✓) Store a data value without decimal. The value should be zero.
to the right of the decimal place.

- Store a single digit decimal value.
- Store a decimal value to the maximum number of allowed decimal positions.
- Store a decimal value greater than the maximum number of allowed decimal positions. An error should occur.

( ) Skip the field using the TAB key.

( ) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

( ) Delete an existing value. The field should be cleared and stored:

- Delete the value using the space bar.
- Delete the value using the clear field key (F8).
Field Prompt: Qual
Field Usage: Updateable
Field Name: QUALIFIER

Field Help

This field contains the data validation qualifier codes.

This data field:
- May contain any character combination.
- All input is converted to upper case.
- Must contain a valid value. See LOV for list of valid values.
- Has a default value.

Field Test Plan

( Verify that the field accepts character or numeric data within
the limits imposed by validation criteria.

( Enter data beyond the length of the field:
  ( } If autoskip is in effect, cursor will skip to the next field.
  ( } If no autoskip, cursor will remain at the end of the field and
overlay characters, leaving the last character keyed in the
last position of the field.

( Display column help. Verify that the narrative adequately
describes the column's purpose and functions in end-user terms.

( Change the field in an existing record. Verify that the change
occurred by displaying the record on the screen before and after
the changes were made.

( Change the field where a range of valid values exists:
  ( ) Value below valid range should display message COM00101 or
COM00103 (if no LOV).
  ( ) Value above valid range should display message COM00101 or
COM00103 (if no LOV).
  ( ) Minimum value within the range should be accepted.
  ( ) Maximum value within the range should be accepted.
  ( ) Random value within the range should be accepted.

( Enter query mode and verify that this field is accessible.

( Enter query mode and enter a valid value in this field.
  ( ) Only records matching the entered value should be displayed.

( Accept the default.

( Modify each default value with a valid alternative.

23
( ) Modify each default value with an invalid alternative.

( ) Skip the field using the TAB key.

( ) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

( ) Delete an existing value. The field should be cleared and stored:

( ) Delete the value using the space bar.
( ) Delete the value using the clear field key (F8).

( ) Test LOV:
( ) Select the first entry in the LOV.
( ) Select the last entry in the LOV.
( ) Use the FIND option and select an entry.
Field Prompt: Text?
Field Usage: Queryable Only
Field Name: FLAG_TEXT

Field Help

This field is a flag that identifies the presence of additional textual information about the data item. If "N" is displayed, no text is currently present. If "Y" is displayed, text of one or more types is present. To enter or display text, press F7. A popup screen will display the default text type for the data item. If this default text type is the one you want, you may either read or add text. If you want to use another available text type for the data item, press LOV (F9) to display and select the desired text type. Once you have entered any text into the database, the indicator flag for the data item will be set to "Y".

This data field:
- Provides a default value. To accept the default value, press the ENTER key or TAB key.
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.
( ) Test LOV:
   ( ) Select the first entry in the LOV.
   ( ) Select the last entry in the LOV.
   ( ) Use the FIND option and select an entry.
( ) Press the TEXT key (F7). The text popup should be displayed.
( ) With the cursor at the text type, press LOV (F9). Where available, a list of other text types available for the entry will be displayed. Select one text type for testing.
( ) Press the ENTER key to move the cursor to the text block.
( ) Enter two lines of text. The cursor should automatically move to the next line when one line is full.
( ) Press the COMMIT key (F10). Press ENTER in response to prompt
until the popup disappears and the primary screen reappears.

(j) The text flag should be set to 'Y'.

( ) Select and update text that already exists.
Application: TLEMIS  Liquid Effluent Monitoring Information System

Transaction: LE4100 GI Enter Constituent Results

Comment ID: 1138  Priority: LOW  Date: 24-JUN-93

Status: ASSIGNED  Date: 24-JUN-93  Class:

Type: PROBLEM

Assigned To: TODD ADAMS

Entered By: LORRAINE CAMPBELL

System ID: 92000024906  Oracle ROWID: 000001EB.0019.0009

Last Error: -0

Last Msg: FRM-40350 Query caused no records to be retrieved.

Table: SAMPLE

Block: SAMPLE

Field: SAMPLE.IDENT SAMPLE

DESCRIPTION

HEIS field does not order logically

FIXED  6/24/93
Application: TLEMIS  Liquid Effluent Monitoring Information System

Transaction: LE4100U1 Enter Constituent Results

Comment ID: 1139  Priority: LOW  Date: 24-JUN-93

Status: ASSIGNED  Date: 24-JUN-93  Class:
Type: PROBLEM
Assigned To: TODD ADAMS
Entered By: LORAINE CAMPBELL
System ID: 92000027512  Oracle ROWID: 000004AB.0006.0009
Last Error: -0
Last Msg: FRM-40350  Query caused no records to be retrieved.
Table: RESULTS
Block: RESULT
Field: RESULT.DSP_IDENT_METHOD

DESCRIPTION:

Single query will not work, the whole list appears whether or not you put correct into or not.
Application: TLEMIS  Liquid Effluent Monitoring Information System
Transaction: LE410001 Enter Constituent Results

<table>
<thead>
<tr>
<th>Comment ID</th>
<th>1140</th>
<th>Priority</th>
<th>LOW</th>
<th>Date: 24-JUN-93</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>ASSIGNED</td>
<td>Date: 24-JUN-93</td>
<td>Class:</td>
<td></td>
</tr>
<tr>
<td>Type</td>
<td>PROBLEM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assigned To</td>
<td>TODD ADAMS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entered By</td>
<td>LORRAINE CAMPBELL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System ID</td>
<td>82000027512</td>
<td>Oracle ROWID: 0000004AB:0006:0009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Last Error</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Last Msg</td>
<td>FRM-40739: Clear_Form with Full_Rollback not allowed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Table</td>
<td>RESULTS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block</td>
<td>RESULT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field</td>
<td>RESULT.DSP_IDENT_METHO</td>
<td>D</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DESCRIPTION**

when trying to save duplicate record I was given an Oracle error msg instead of the duplicate record error msg
## Programmer’s Bug Report

**Application:** TLEMIS  
**Transaction:** LE4100U1 Enter Constituent Results

<table>
<thead>
<tr>
<th>Comment ID</th>
<th>1141</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority</td>
<td>LOW</td>
</tr>
<tr>
<td>Date</td>
<td>24-JUN-93</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Status</th>
<th>ASSIGNED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assigned To</td>
<td>TODD ADAMS</td>
</tr>
<tr>
<td>Entered By</td>
<td>LORRAINE CAMPBELL</td>
</tr>
<tr>
<td>System ID</td>
<td>92000027535</td>
</tr>
<tr>
<td>Oracle ROWID</td>
<td>00000734.0000.0009</td>
</tr>
</tbody>
</table>

**Last Error:** -0  
**Last Msg:** FRM-40102: Record must be entered or deleted first.  
**Table:** CONSTITUENT_RESULTS  
**Block:** CONRES  
**Field:** CONRES.DSP_IDENT_CAS

---

**DESCRIPTION**

Qualifier does not change back to UJ when arrowing up/down
Application: TLEMIS  Liquid Effluent Monitoring Information System

Transaction: LE41000U1 Enter Constituent Results

-------------------------------
Comment ID: 1143  Priority: LOW  Date: 24-JUN-93
-------------------------------
Status: ASSIGNED  Date: 24-JUN-93  Class: PROBLEM
Assigned To: TODD ADAMS
Entered By: LORRAINE CAMPBELL
System ID: 92000027518  Oracle ROWID: 00000734.000D.0009
Last Error: -0
Last Msg: FRM-40654  Record changed by another user. Re-query to
Table: CONSTITUENT_RESULTS
Block: CONRES
Field: CONRES.CONC_VALUE

help states only 3 decimal places accepted. Field will accept more
than 3 places and doesn’t give any errors.

OK
if a decimal is not placed in the number, i.e., 4444444, the number should have a zero value. When I place the number 444444 in the field and commit, it saves it as is.
The use of Shift-F9 was used in numerous places and needs to be changed to F9. Below is a list of places used.

Trans help --3), 6)
Results block help
LEMIS Module Test Checklist Report

Name: CORRECT AND VALIDATE RESULTS
Short Name: LE4110UI
Purpose: To correct and validate results

Initial Test Date: 4/29/93
Verification Date: 5/1/93

Module Description
------------------
This module is used to store and maintain constituent results information. The form is two pages long and consists of three blocks.

To enter constituent results data:

1) Enter the HEIS number and press <shift-F12>. The associated laboratory will appear.

2) Press <Page Down> to create Results of Sample Analysis Records in the following block and to move your cursor to the DATE EXTRACTED field in that block. The REQ NUM, ANALYSIS CLASS, and METHOD fields are query only and cannot be changed.

3) Enter the Date Extracted and Date Analysis. Both of these fields are optional.

4) If desired, you may press <F7> to add any associated text for each request line number. If you choose this option, the TEXT? field will change from "N" to "Y" after you have committed the text.

5) Press the <Page Down> key to move to page 2 of the form where you will find the associated constituents for the analysis class and method that you chose on page 1. Your cursor will be in the
Module Description

Concentration Value field. Cas Id and Constituent Id are query only fields and may not be modified.

6) Enter the Concentration Value and press <Tab> to move to the next field.

7) The Unit of Measure field will contain a default value. You may leave it as it is or change it. A LOV (list of values) is available by pressing <F9>. Press tab to move to the next field.

8) The Qualifier field is defaulted to "UJ". You may leave it as it is or change it by entering a valid value or pressing <F9> for the list of values.

9) You may add associated text for this each record by pressing <F7>. If you chose this option and commit your text, the Text? field will change from "N" to "Y".

10) Use <Down arrow> to move through the list of constituents. As you move down through the constituent list, the Qualifier field will change from blank to "UJ". This is to signify that you have addressed this record so that if you leave this function and return at a later date, you will know by looking at the Qualifier column which records you have already updated.

11) Press <F10> to commit your changes.

Module Help

This transaction is used to view sampling results, and to set the qualifier flag for the constituent results.

The form is two pages long and has 3 blocks: 1) Sample (HEIS) number, 2) Analyses performed, and 3) constituent results.

To query results data:

1) If the text "Enter a query; press Shift-12 to execute," does not appear at the bottom of the screen press <FL2>.
2) Enter the HEIS number and press <shift-F12>. The laboratory that analysed this sample will be displayed, along with a list of the analyses performed for this sample.
3) Press <Page Down> to move to the list of analyses performed.
4) The Date Extracted, Analysis Date, and Concentration Units fields may be modified in this block.
5) If desired, you may press <F7> to add or edit any associated text for this result record. If you choose this option, the TEXT? field will change from "N" to "Y" after you have committed the text.
6) Move the cursor to the desired analysis record.
Module Help

7) Press the <Page Down> key to move to page 2 of the form where the associated constituents for the analysis will be displayed. The cursor will be in Concentration Value field. This field and the qualifier field may be changed.

8) You may add associated text for this each record by pressing <F7>. If you chose this option and commit your text, the Txt? field will change from "N" to "Y".

9) Use <Down arrow> to move through the list of constituents. As you move down through the constituent list, the Qualifier field will change from blank to "UJ". This is to signify that you have addressed this record so that if you leave this function and return at a later date, you will know by looking at the Qualifier column which records you have already updated.

10) Press <F10> to commit your changes.

UNIT TEST CHECKLIST

--- Module Function Key ---

<table>
<thead>
<tr>
<th>Function</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show Version</td>
<td>Shift-F10</td>
</tr>
<tr>
<td>Comment/Bug</td>
<td>Shift-F3</td>
</tr>
<tr>
<td>Fast Access</td>
<td>F5</td>
</tr>
<tr>
<td>Back</td>
<td>F4 or Esc</td>
</tr>
<tr>
<td>Main Menu</td>
<td>Shift-F4</td>
</tr>
<tr>
<td>Key Template</td>
<td>Ctrl-F1</td>
</tr>
<tr>
<td>Context Print</td>
<td>F11</td>
</tr>
<tr>
<td>Query Print</td>
<td>Ctrl-F11</td>
</tr>
<tr>
<td>Oracle Print</td>
<td>Shift-F11</td>
</tr>
</tbody>
</table>

--- Block Title: Sample ---

<table>
<thead>
<tr>
<th>Function</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home/End</td>
<td>Home/End</td>
</tr>
<tr>
<td>Scroll Up/Dn</td>
<td>Shift-Up/Dn</td>
</tr>
<tr>
<td>Prev/Nxt Rec</td>
<td>Up/Down</td>
</tr>
<tr>
<td>Clear Field</td>
<td>F8</td>
</tr>
<tr>
<td>Clear Form</td>
<td>Shift-F8</td>
</tr>
<tr>
<td>Enter Query</td>
<td>F12</td>
</tr>
<tr>
<td>Count Query</td>
<td>Ctrl-F12</td>
</tr>
<tr>
<td>Correct Query</td>
<td>(UPPERCASE and LOVs)</td>
</tr>
<tr>
<td>Execute Qry</td>
<td>Shift-F12</td>
</tr>
<tr>
<td>Prv/Nxt Block</td>
<td>PgDn/PgUp</td>
</tr>
<tr>
<td>Exit System</td>
<td>Ctrl-F4</td>
</tr>
<tr>
<td>( ) Key Help</td>
<td>Shift-F2</td>
</tr>
<tr>
<td>( ) Dis Journal</td>
<td>Shift-F2</td>
</tr>
<tr>
<td>( ) Edit Text</td>
<td>F7</td>
</tr>
<tr>
<td>( ) Spec Func 1</td>
<td>Shift-F5</td>
</tr>
<tr>
<td>( ) Spec Func 2</td>
<td>Ctrl-F5</td>
</tr>
</tbody>
</table>
TEST PLAN

Testing of the transaction is performed at four levels:

1. Developer testing.
2. Secondary testing.
3. End user testing.
4. Production release & verification.

As each applicable section of this test plan is completed, the designated individual responsible for the section will sign the plan in the appropriate places. Each check off item will be completed.
The status of the transaction will be updated in the data dictionary as it progresses through the development and test steps.

Developer Testing

As each individual transaction is generated, the developer performs tests against the transaction to insure that it meets specifications and works properly. Upon successful completion of this testing, the transaction is made available for secondary testing.

Test status conditions are:

\( \begin{align*}
1 & \quad \text{Transaction under development, untested.} \\
2 & \quad \text{Transaction moved to development directory (addmod).} \\
3 & \quad \text{Development complete, initial unit testing in progress.} \\
4 & \quad \text{Help added} \\
5 & \quad \text{Unit test checklist completed.} \\
6 & \quad \text{Specific test plan added (if needed).} \\
7 & \quad \text{Any bugs found in Unit test fixed.} \\
8 & \quad \text{Updated test book printed.} \\
\end{align*} \)

Secondary Testing

Secondary testing is performed by a person external to the development team. Tests are performed using a standardized test checklist. Initial testing is performed to ensure that the transaction meets the functional requirements of the transaction and satisfies the test plan narrative that follows.

\( \begin{align*}
4 & \quad \text{Secondary testing in progress.} \\
5 & \quad \text{Secondary testing complete, problems found. Resolution in progress.} \\
6 & \quad \text{Unable to resolve problem at this time.} \\
7 & \quad \text{Problem resolution complete.} \\
8 & \quad \text{Secondary testing complete, no problems found.} \\
\end{align*} \)

When problems are found:

1. The tester passes the checklist to the project manager for review and action.
2. The project manager assigns the checklist to the developer of the transaction for correction of the problems.
3. The developer corrects the described problems, records the corrective actions taken and the number of hours of corrective effort used, tests the transaction for correct operation, and returns the checklist to the project manager.
4. The project manager returns the checklist to the tester for retesting.
The above sequence of events repeats until the tester signs off the transaction as passing the test requirements.

End User Testing

The transaction is tested by end users for a predetermined time period. This testing is done in the development environment. If no problems are encountered, or all problems are resolved at the end of this time period, the module is ready for Project Manager review.

(  ) 9 - End User testing in progress.
(  ) 10 - Problem found, resolution in progress.
(  ) 11 - Problem resolution complete.
   Developer ____________ Date Complete ______
(  ) 12 - Resolution verified.
   Tester ______________ Date Complete ______

Production Status

(  ) 13 - Ready for Project Manager/System Architect review.
   The Project Manager or System Architect reviews all test results and determines that the transaction has completed testing.
   Architect/Manager ____________ Date Complete 5/4/93

(  ) 14 - The transaction is ready to be placed into production.
   Software files moved to production directory.
   Transaction added to production menu.
   Transaction access given to production roles.
   Validation test performed in production.
   Production documentation up to date.
   By ____________ Date Done 5/4/93

Module Test Plan

( ) Display transaction help. Verify that the narrative adequately describes the purpose and functions of the transaction in end-user terms.

( ) Transaction help describes:
   ( ) Purpose of the transaction
   ( ) Functions performed by the transaction
   ( ) Where multiple block, what happens in each block.
Block Title: Sample
Block Table: SAMPLE
Block Usage: Query Only

Block Help

This block shows the list of samples that have been defined for this sample request. Each sample may be for a different location, and have a different purpose (ie Primary, Blank, Dup).

Block Test Plan

(✓) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

(✓) Block help describes:
- Purpose of the block
- Options available in the block
- The relationship of the block to the transaction or to the principal parent block of the transaction
- Navigation to other blocks of the transaction

(✓) Where block synchronization is used, ensure that the block data is in sync with the parent block.

(✓) Query a single record:
- A single record is retrieved.
- Pressing the F12 key clears the record and permits entering a second query.
- The second query successfully retrieves the desired data.

(✓) Query multiple records using wild cards:
- Pressing F12 clears the block and makes the block ready for a query.
- A query composed of a trailing % wildcard retrieves the desired data.
- A query using a prefix % wildcard retrieves the correct data.
- A query using both prefix and suffix % wildcards retrieves the correct data.
- A query using the underscore (_) position wildcard retrieves the correct data.

(✓) Verify that the data queries in the block are ordered logically.
Field Prompt: HEIS Number
Field Usage: Non Updateable
Field Name: IDENT_SAMPLE

Field Help

This field uniquely identifies the sample to the database. An error will occur if you attempt to enter a identification value already present in the database. These records are automatically created with a temporary Sample ID. When the field data is entered, the HEIS number will be entered as the Sample ID.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

(1) Enter query mode and verify that this field is accessible.
(2) Enter query mode and enter a valid value in this field.
(3) Only records matching the entered value should be displayed.
(4) Enter a duplicate value. An error should occur.
(5) From LOV, select a value already present in the database. An error should occur.
Block Title: Results of Sample Analysis
Block Table: RESULTS
Block Usage: Update Only

Block Help

This table works in conjunction with others to provide a comprehensive picture of sample analysis results. There may be more than one result information set that occurs when samples are split across laboratories or when laboratory returns are staggered.

Block Test Plan

Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

Block help describes:

- Purpose of the block
- Options available in the block
- The relationship of the block to the transaction or to the principal parent block of the transaction
- Navigation to other blocks of the transaction

Where block synchronization is used, ensure that the block data is in sync with the parent block.

Query a single record:

- A single record is retrieved.
- Pressing the F12 key clears the record and permits entering a second query.
- The second query successfully retrieves the desired data.

Query multiple records using wild cards:

- Pressing F12 clears the block and makes the block ready for a query.
- A query composed of a trailing % wildcard retrieves the desired data.
- A query using a prefix % wildcard retrieves the correct data.
- A query using both prefix and suffix % wildcards retrieves the correct data.
- A query using the underscore (_) position wildcard retrieves the correct data.

Verify that the data queries in the block are ordered logically.

Update a record:
The change count should increment.

The date updated should become the current date.

An error should occur if the operator owner identifier does not match the data owner identifier.

Delete a record from the block:

- If the record has dependent records, the delete should fail unless the help text indicates that a cascading delete is permitted.
- For a single record block, the block should clear.
- For a multi-record block, the record pointed to by the cursor should clear.
- Use the delete key.

For a single record block, the block should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should appear in the block.

For a multiple record block, the entry should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should move up to fill the cleared space.

Field Prompt: Extract
Field Usage: Updateable
Field Name: DATE_EXTRACTED

Field Help

Enter the date the sample was extracted.
This field:

- Is optional and may be left empty.
- Must use the following structure: MM/DD/YY where

  MM = the number of the Month.
  DD = the number of the day.
  YY = the two-digit number of the year, eg. ('92' = '1992')

Field Test Plan

- Verify that the field only allows valid dates.
- Enter query mode and verify that this field is accessible.
- Enter query mode and enter a valid value in this field.
  - Only records matching the entered value should be displayed.
- Skip the field using the TAB key.
- Enter data into the field, backspace the data out of the field.
and TAB to the next field. The database should contain a null value.

Delete an existing value. The field should be cleared and stored:

- Delete the value using the space bar.
- Delete the value using the clear field key (F8).

Field Prompt: Analysis
Field Usage: Updateable
Field Name: DATE_ANALYSIS

Field Help

Enter the date the analysis was performed on the sample. This field:

- Is optional and may be left empty.
- Must use the following structure: MM/DD/YY where

  MM = the number of the month.
  DD = the number of the day.
  YY = the two digit number of the year, e.g. '92' = '1992'.

Field Test Plan

- Verify that the field only allows valid dates.
- Enter query mode and verify that this field is accessible.
- Enter query mode and enter a valid value in this field.
  (Only records matching the entered value should be displayed.)
- Skip the field using the TAB key.
- Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.
- Delete an existing value. The field should be cleared and stored:
  - Delete the value using the space bar.
  - Delete the value using the clear field key (F8).
Field Prompt: Units
Field Usage: Updateable
Field Name: CONCENTRATION_UNITS

Field Help

This field is the concentration units for the constituent data associated with this results record. List of values available.

This data field:
- May contain any character combination
- All input is converted to upper case.

Field Test Plan

(1) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

(1) Enter data beyond the length of the field:
   (1) If autoskip is in effect, cursor will skip to the next field.
   (1) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

(1) Enter query mode and verify that this field is accessible.

(1) Enter query mode and enter a valid value in this field.
   (1) Only records matching the entered value should be displayed.

(1) Accept the default.

(1) Modify each default value with a valid alternative.

(1) Modify each default value with an invalid alternative.

(1) Skip the field using the TAB key.

(1) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

(1) Delete an existing value. The field should be cleared and stored:
   (1) Delete the value using the space bar.
   (1) Delete the value using the clear field key (F8).
Field Prompt: Text?
Field Usage: Queryable Only
Field Name: FLAG_TEXT

Field Help
This field is a flag that identifies the presence of additional textual information about the data item. If "N" is displayed, no text is currently present. If "Y" is displayed, text of one or more types is present. To enter or display text, press F7. A popup screen will display the default text type for the data item. If this default text type is the one you want, you may either read or add text. If you want to use another available text type for the data item, press LOV (F9) to display and select the desired text type. Once you have entered any text into the database, the indicator flag for the data item will be set to "Y".

Field Test Plan

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field. Only records matching the entered value should be displayed.

( ) Test LOV:
   ( ) Select the first entry in the LOV.
   ( ) Select the last entry in the LOV.
   ( ) Use the FIND option and select an entry.

( ) Press the TEXT key (F7). The text popup should be displayed.

( ) With the cursor at the text type, press LOV (F9). Where available, a list of other text types available for the entry will be displayed. Select one text type for testing.

( ) Press the ENTER key to move the cursor to the text block.

( ) Enter two lines of text. The cursor should automatically move to the next line when one line is full.

( ) Press the COMMIT key (F10). Press ENTER in response to prompt
until the popup disappears and the primary screen reappears.

( ) The text flag should be set to 'Y'.

( ) Select and update text that already exists.
Block Title: Constituents Found In Results
Block Table: CONSTITUENT_RESULTS
Block Usage: Update Only

Block Help

This table contains the analytical results for one constituent for a specific sample as determined by the analytical laboratory that performed the analysis.

Block Test Plan

(1) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:
   ( ) Purpose of the block
   ( ) Options available in the block
   ( ) The relationship of the block to the transaction or to the principal parent block of the transaction
   ( ) Navigation to other blocks of the transaction

( ) Where block synchronization is used, ensure that the block data is in sync with the parent block.

( ) Query a single record:
   ( ) A single record is retrieved.
   ( ) Pressing the F12 key clears the record and permits entering a second query.
   ( ) The second query successfully retrieves the desired data.

( ) Query multiple records using wild cards:
   ( ) Pressing F12 clears the block and makes the block ready for a query.
   ( ) A query composed of a trailing % wildcard retrieves the desired data.
   ( ) A query using a prefix % wildcard retrieves the correct data.
   ( ) A query using both prefix and suffix % wildcards retrieves the correct data.
   ( ) A query using the underscore (_) position wildcard retrieves the correct data.

( ) Verify that the data queries in the block are ordered logically.

( ) Update a record:
   ( ) The change count should increment.
( ) The date updated should become the current date.
( ) An error should occur if the operator owner identifier does not match the data owner identifier.

( ) Delete a record from the block:
( ) If the record has dependent records, the delete should fail unless the help text indicates that a cascading delete is permitted.
( ) Use the clear record key (CTRL/F8).
( ) For a single record block, the block should clear.
( ) For a multi-record block, the record pointed to by the cursor should clear.
( ) Use the delete key.
( ) For a single record block, the block should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should appear in the block.
( ) For a multiple record block, the entry should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should move up to fill the cleared space.

( ) Down arrow through the list of constituents.
( ) The Qualifier field should automatically update to 'UJ'.

( ) Try to blank out the Qualifier field for one of the constituent records. Press the commit key. Then down arrow through the list of constituents and then up arrow back to the constituent that was blanked out.
( ) The Qualifier field should be automatically set back to 'UJ'.

Field Prompt: CAS Id
Field Usage: Queryable Only
Field Name: IDENT_CAS

Field Help
-----------------------------------------------
This data field:
- Is optional and may be left empty.
- May contain any character combination.
- All input is converted to upper case.

Field Test Plan
-----------------------------------------------
( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.
( ) Enter a duplicate value. An error should occur.
Field Prompt: Full Name  
Field Usage: Queryable Only  
Field Name: NAME_CON_LONG

Field Help

This data field:

- Is optional and may be left empty.
- May contain any character combination.
- All input is converted to upper case.

Field Test Plan

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   (Only records matching the entered value should be displayed.)

( ) Enter a duplicate value. An error should occur.

( ) From LOV, select a value already present in the database. An error should occur.
Field Prompt: Conc Value
Field Usage: Updateable
Field Name: CONC_VALUE

Field Help
Enter the concentration value for the constituent.
This field:
- Is optional and may be left empty.
- Must contain a numeric value - 0-9, '.', or '-'

Field Test Plan

( ) Attempt to store alphabetic characters in the field. An error should result.
( ) Begin the field entry with a space. An error should result.
( ) Attempt to enter a longer data value than allowed.
( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.
( ) Attempt to store decimal data. Data to the limit of the decimal places provided by the field definition will be allowed.

( ) Help for the field should identify the number of decimal places allowed.
( ) Store a data value without decimal. The value should be zero to the right of the decimal place.
( ) Store a single digit decimal value.
( ) Store a decimal value to the maximum number of allowed decimal positions.
( ) Store a decimal value greater than the maximum number of allowed decimal positions. An error should occur.

( ) Skip the field using the TAB key.
( ) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.
( ) Delete an existing value. The field should be cleared and stored:

( ) Delete the value using the space bar.
( ) Delete the value using the clear field key (F8).
This field contains the data validation qualifier codes.

This data field:
- May contain any character combination.
- All input is converted to upper case.
- Must contain a valid value. See LOV for list of valid values.
- Has a default value.

Field Test Plan

( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:

  ( ) If autoskip is in effect, cursor will skip to the next field.

  ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.

  ( ) Only records matching the entered value should be displayed.

( ) Accept the default.

( ) Modify each default value with a valid alternative.

( ) Modify each default value with an invalid alternative.

( ) Skip the field using the TAB key.

( ) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value. ( Defaults to U )

( ) Delete an existing value. The field should be cleared and stored:

    ( ) Delete the value using the space bar.

    ( ) Delete the value using the clear field key (F8).

( ) Test LOV:

  ( ) Select the first entry in the LOV.

  ( ) Select the last entry in the LOV.
Use the FIND option and select an entry.

Block repeatedly asks to commit.
Field Prompt: Text?
Field Usage: Queryable Only
Field Name: FLAG_TEXT

Field Help

This field is a flag that identifies the presence of additional textual information about the data item. If "N" is displayed, no text is currently present. If "Y" is displayed, text of one or more types is present. To enter or display text, press F7. A popup screen will display the default text type for the data item. If this default text type is the one you want, you may either read or add text. If you want to use another available text type for the data item, press LOV (F9) to display and select the desired text type. Once you have entered any text into the database, the indicator flag for the data item will be set to "Y".

This data field:
- Provides a default value. To accept the default value, press the ENTER key or TAB key.
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
    ( ) Only records matching the entered value should be displayed.

( ) Test LOV:
    ( ) Select the first entry in the LOV.
    ( ) Select the last entry in the LOV.
    ( ) Use the FIND option and select an entry.

( ) Press the TEXT key (F7). The text popup should be displayed.

( ) With the cursor at the text type, press LOV (F9). Where available, a list of other text types available for the entry will be displayed. Select one text type for testing.

( ) Press the ENTER key to move the cursor to the text block.

( ) Enter two lines of text. The cursor should automatically move to the next line when one line is full.

( ) Press the COMMIT key (F10). Press ENTER in response to prompt
until the popup disappears and the primary screen reappears.

( ) The text flag should be set to 'Y'.

( ) Select and update text that already exists.
Programmer's Bug Report

Application: LEMIS  Liquid Effluent Monitoring Information System
Transaction: LE4110U1 Correct and Validate Results

Comment ID : 1047  Priority: LOW  Date: 29-APR-93
Type : PROBLEM
Assigned To: KEN ATKINS
Entered By : LORRAINE CAMPBELL
System ID : 92000012591  Oracle ROWID: 000001E8.0001.0009
Last Error : -0
Last Msg : FRM-40200  Field is protected against update.
Table : SAMPLE
Block : SAMPLE
Field : SAMPLE.DSP_DESCRIPTION

DESCRIPTION
How come there is no mention of the field "purpose" in both block help and trans help? Also there is no testing for purpose.

CORRECTIVE ACTION
5/3/93 - Help has been fixed. Test purpose just like his number (it is non-updateable, but queryable)

OK
Programmer's Bug Report

Application: LEMIS Liquid Effluent Monitoring Information System

Transaction: LE4110U1 Correct and Validate Results

Class: Status: HANDLED Date: 03-MAY-93

Type: PROBLEM

Assigned To: KEN ATKINS

Entered By: LORRAINE CAMPBELL

System ID: 92000016725 Oracle ROWID: 00000385.0000.0009

Last Error: -0

Last Msg: FRM-41800 List of values not available for this field
Table: RESULTS
Block: RESULT
Field: RESULT.CONCENTRATION_U NITS

DESCRIPTION

help states LOV available, but its not! also hint text states field is optional. Help doesn't state whether it is or isn't.

CORRECTIVE ACTION

5/3/93 - Added LOV and validation to field.

[Signature]
Programmer's Bug Report

Application: LEMIS  Liquid Effluent Monitoring Information System

Transaction: LE4110U1 Correct and Validate Results

Comment ID : 1049  Priority: LOW  Date: 29-APR-93

Status : HANDLED  Date: 03-MAY-93  Class: PROBLEM

Assigned To: KEN ATKINS
Entered By: LORRAINE CAMPBELL
System ID: 92000016732  Oracle ROWID: 00000A69.0010.0009

Last Error: -0
Last Msg: FRM-40353  Query cancelled.

Table: CONSTITUENT_RESULTS
Block: CONRES
Field: CONRES.CONC_VALUE

DESCRIPTION

hint text does not make sense.

CORRECTIVE ACTION

5/3/93 - Rewrote hint text.
Programmer's Bug Report

Application: LEMIS Liquid Effluent Monitoring Information System

Transaction: LE4110U1 Correct and Validate Results

Comment ID: 1050  Priority: LOW  Date: 29-APR-93

Status: HANDLED  Date: 03-MAY-93  Class: PROBLEM

Assigned To: KEN ATKINS
Entered By: LORRAINE CAMPBELL
System ID: 9200016732  Oracle ROWID: 00000A69.0010.0009
Last Error: -0
Last Msg: FRM-50016 Legal characters are 0-9 - + E.
Table: CONSTITUENT_RESULTS
Block: CONRES
Field: CONRES.CONC_VALUE

DESCRIPTION

help does not state what the decimal value is. cannot begin field with a space--number just moves to left when tab is pressed.

CORRECTIVE ACTION

5/3/93 - Help fixed.
Application: LEMIS  Liquid Effluent Monitoring Information System

Transaction: LE4110U1 Correct and Validate Results

-------------------------------
Comment ID : 1051  Priority: LOW  Date: 29-APR-93
-------------------------------

Status : HANDLED  Date: 03-MAY-93  Class:
Type : PROBLEM
Assigned To: KEN ATKINS
Entered By: LORRAINE CAMPBELL
System ID : 92000016732  Oracle ROWID: 00000A69.0010.0009
Last Error : -0
Last Msg : FRM-40400  Transaction complete -- 1 records posted an
Table : CONSTITUENT_RESULTS
Block : CONRES
Field : CONRES.CONC_VALUE

DESCRIPTION

Block keeps asking you to commit changes even to query but no changes have been made

CORRECTIVE ACTION

5/3/93 - The record DID change. Every time you enter a constituent record, the qualifier is set to 'UJ' (if it is not already). So when you entered this block, the first record was changed.
LEMIS Module Test Checklist Report

Name: ENTER/CORRECT ACTUAL METHOD
Short Name: LE4120U1
Purpose: To maintain the actual methods

Initial Test Date: 11-01-93
Verification Date: 11/02/93

Module Description
-----------------
This transaction is used to enter and correct the actual methods for a sample.

The form is one page long and has 2 blocks: 1) Sample (HEIS) number, and 2) Method.

To enter or correct the actual method for a sample:

1) If the text "Enter a query; press Shift-12 to execute, " does not appear at the bottom of the screen press <F12>.
2) Enter the HEIS number and press <shift-F12>. The laboratory that analyzed this sample will be displayed, along with the purpose of this sample.
3) Press <Page Down> to move to the list of methods.
4) If "Y" appears in the TEXT? field, you can access the text by pressing <F7>.
5) Use <Down arrow> to move through the list of methods.
6) Press <TAB> to move to the Actual Method ID field.
7) The Actual Method ID field is the only field that may be modified in this block or in the entire form for that matter.
Module Help
---------
8) Enter the correct Actual Method Id for the Method.
9) Press <F10> to commit your changes.
10) No records may be added or deleted in this form.

UNIT TEST CHECKLIST

( ) Module Function Key
------------------------
(✓) Show Version : Shift-F10 :
(✓) Comment/Bug : Shift-F3 :
(✓) Fast Access : F5 :
(✓) Back : F4 or Esc :
(✓) Main Menu : Shift-F4 :
(✓) Key Template : Ctrl-F1 :
(✓) Context Prnt : F11 :
(✓) Query Print : Ctrl-F11 :
(✓) Oracle Print : Shift-F11 :

(✓) Block Title: Sample
Block Table: SAMPLE

(✓) Help : F1 : (✓) Key Help : Shift-F1 :
(✓) Online Doc : F2 : (✓) Dis Journal : Shift-F2 :
(✓) Related Data : F3 : (✓) Edit Text : F7 :
(✓) Spec Func 1 : Shift-F5 : (✓) Spec Func 2 : Ctrl-F5 :

(✓) Home/End : Home/End : (✓) Prv/Nxt Block: PgDn/PgUp:
(✓) Scroll Up/Dn : Shift-Up/Dn: (✓) Prv/Nxt Field: Tab/Sh-Tb:
(✓) Prv/Nxt Rec : Up/Down : (✓) Commit Form : F10 :

(✓) Clear Field : F8 : (✓) Clear Record : Shift-F8 :
(✓) Insert Rec : Insert : (✓) Add record at end :
(✓) Delete Rec : Delete : (✓) Duplicate Rec: F6 :

(✓) Enter Query : F12 : (✓) Count Query : Ctrl-F12 :
(✓) Correct Query Fields? : (✓) Uppercase and LOVs? :
(✓) Execute Qry : Shift-F12: (✓) Correct Query Order? :
TEST PLAN

Testing of the transaction is performed at four levels:

1. Developer testing.
2. Secondary testing.
3. End user testing.
4. Production release & verification.

As each applicable section of this test plan is completed, the designated individual responsible for the section will sign the plan in the appropriate places. Each check off item will be completed. The status of the transaction will be updated in the data dictionary as the transaction progresses through the development and test steps.

Developer Testing

As each individual transaction is generated, the developer performs tests against the transaction to insure that it meets specifications and works properly. Upon successful completion of this testing, the transaction is made available for secondary testing.

Test status conditions are:

1. Transaction under development, untested.
2. Transaction moved to development directory (addmod).
3. Transaction complete, initial unit testing in progress.
Secondary Testing

Secondary testing is performed by a person external to the development team. Tests are performed using a standardized test checklist. Initial testing is performed to ensure that the transaction meets the functional requirements of the transaction and satisfies the test plan narrative that follows.

1. The tester passes the checklist to the project manager for review and action.
2. The project manager assigns the checklist to the developer of the transaction for correction of the problems.
3. The developer corrects the described problems, records the corrective actions taken and the number of hours of corrective effort used, tests the transaction for correct operation, and returns the checklist to the project manager.
4. The project manager returns the checklist to the tester for retesting.

The above sequence of events repeats until the tester signs off the transaction as passing the test requirements.

End User Testing

The transaction is tested by end users for a predetermined time period. This testing is done in the development environment. If no problems are encountered, or all problems are resolved at the end of this time period, the module is ready for Project Manager review.

Date Complete 11/01/93

Developer

When problems are found:

4 - Secondary testing in progress.
5 - Secondary testing complete, problems found. Resolution in progress.
6 - Unable to resolve problem at this time.
7 - Problem resolution complete.
8 - Secondary testing complete, no problems found.

Tester

Date Complete 1/24/94

1 - Secondary testing complete.
2 - Any bugs found in Unit test fixed.
3 - Initial Unit testing complete.
4 - Unit Test checklist completed.
5 - Specific test plan added (if needed).
6 - Updated test booket printed.

Date Complete

Developer
Production Status

( ) 13 - Ready for Project Manager/System Architect review.

( ) The Project Manager or System Architect reviews all test results and determines that the transaction has completed testing.

Architect/Manager ____________ Date Complete ____________

( ) 14 - The transaction is ready to be placed into production.

( ) Software files moved to production directory.

( ) Transaction added to production menu.

( ) Transaction access given to production roles.

( ) Validation test performed in production.

( ) Production documentation up to date.

( ) 15 - The transaction has been put into production

By ____________ Date Done __________

Module Test Plan

( ) Display transaction help. Verify that the narrative adequately describes the purpose and functions of the transaction in end-user terms.

( ) Transaction help describes:

( ) Purpose of the transaction

( ) Functions performed by the transaction

( ) Where multiple block, what happens in each block.

Block Title: Sample
Block Table: SAMPLE
Block Usage: Query Only

---

Block Help

This block shows the list of samples that have been defined for this sample request. Each sample may be for a different location, and have a different purpose (ie Primary, Blank, Dup).

---

Block Test Plan

( ) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:
Block Test Plan

Block help describes:

• Purpose of the block
• Options available in the block
• The relationship of the block to the transaction or to the principal parent block of the transaction
• Navigation to other blocks of the transaction

Where block synchronization is used, ensure that the block data is in sync with the parent block.

Query functionality:

• Query a single record.
• Pressing the F12 key clears the record and permits entering a second query.
• Query multiple records using wildcards: "%" & "_"

Verify that the data queries in the block are ordered logically.

Field Prompt: HEIS Number
Field Usage: Non Updateable
Field Name: IDENT_SAMPLE

Field Help

This field uniquely identifies the sample to the database. An error will occur if you attempt to enter a identification value already present in the database. These records are automatically created with a temporary Sample ID. When the field data is entered, the HEIS number will be entered as the Sample ID.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

Enter query mode and verify that this field is accessible.

Enter query mode and enter a valid value in this field.
Only records matching the entered value should be displayed.
Block Help

This table is used to store the header information for the results of the methods performed on a sample. It is used to store information that applies to all of the constituents tested for by a method.

Block Test Plan

( ) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

( ) Block help describes:
  ( ) Purpose of the block
  ( ) Options available in the block
  ( ) The relationship of the block to the transaction or to the principal parent block of the transaction
  ( ) Navigation to other blocks of the transaction

( ) Where block synchronization is used, ensure that the block data is in sync with the parent block.

( ) Query functionality:
  ( ) Query a single record.
  ( ) Pressing the F12 key clears the record and permits entering a second query.
  ( ) Query multiple records using wildcards: "%" & "_"

( ) Verify that the data queries in the block are ordered logically.

( ) Update a record:
  ( ) The change count should increment.
  ( ) The date updated should become the current date.
  ( ) An error should occur if the operator owner identifier does not match the data owner identifier.

Field Prompt: Text?
Field Usage: Queryable Only
Field Name: FLAG_TEXT

Field Help

This field is a flag that identifies the presence of additional textual information about the data item. If "N" is displayed, no text is currently present. If "Y" is displayed, text of one or more types is present. To enter
or display text, press F7. A popup screen will display
the default text type for the data item. If this default
text type is the one you want, you may either read or add
text. If you want to use another available text type for
the data item, press LOV (F9) to display and select the
desired text type. Once you have entered any text into
the database, the indicator flag for the data item will be
set to "Y".

This data field:
- Provides a default value. To accept the default value, press the
  ENTER key or TAB key.
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.
    (✓) Only records matching the entered value should be displayed.

(✓) Test LOV:
    (✓) Select the first entry in the LOV.
    (✓) Select the last entry in the LOV.
    (✓) Use the FIND option and select an entry.

(✓) Press the TEXT key (F7). The text popup should be displayed.

(✓) With the cursor at the text type, press LOV (F9). Where
    available, a list of other text types available for the entry
    will be displayed. Select one text type for testing.

(✓) Press the ENTER key to move the cursor to the text block.

(✓) Enter two lines of text. The cursor should automatically move to
    the next line when one line is full.

(✓) Press the COMMIT key (F10). Press ENTER in response to prompt
    until the popup disappears and the primary screen reappears.

(✓) The text flag should be set to 'Y'.

(✓) Select and update text that already exists.
Field Prompt: Actual Method ID
Field Usage: Updateable
Field Name: IDENT_METHOD_ACTUAL

Field Test Plan

(✓) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

(✓) Enter data beyond the length of the field:
   (✓) If autoskip is in effect, cursor will skip to the next field.
   (✓) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.
   (✓) Only records matching the entered value should be displayed.

(✓) Skip the field using the TAB key.

(✓) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

(✓) Delete an existing value. The field should be cleared and stored:
   (✓) Delete the value using the space bar.
   (✓) Delete the value using the clear field key (F8).
PROGRAMMER'S COMMENT REPORT

Liquid Effluent Monitoring Information System

Transaction: LE4120U1 Enter/Correct Actual Method

-- HANDLED --

Comment ID: 98  Priority: INFO  Date: 12-JAN-94

Status: HANDLED  Date: 13-JAN-94  Class: PROBLEM

Disposition: KEVIN SHERROD
Entered By: JENNIFER WALKER
Access Role: DEVELOPER
System ID: 92000030033  Oracle ROWID: 00000735.0002.0009
Last Error: -0
Last Msg: FRM-41000 You pressed an undefined function key.
Table: RESULTS
Block: RESULT
Field: RESULT.DSP_IDENT_SAMPA

DESCRIPTION

The F7 key does not bring up text.
This field does not query either.

CORRECTIVE ACTION

1/13/94 - KWS - Changed the transaction by moving the Text field to
the last field in the sequence. It needed to be there for the F7 key
function to work. It now brings up the text window and is queriable.
I could not repeat the second problem.
LEMIS Module Test Checklist Report

Name: START DATALOAD
Short Name: LE4220U1
Purpose: To start the dataloader process

Initial Test Date: 5/6/93
Verification Date: 5/8/93

Module Description
------------------
This screen is used to collect parameters and then start the data loading process.

Module Help
------------
This transaction is used to start the process that loads data into LEMIS from the files that were transferred to the host from the floppies.

To load transferred data into LEMIS:

1) Select '0' to load the data immediately, or 'B' to load the data at a later time, or in background mode.
2) If 'B' was selected, the cursor will move to the 'when to run' field. Enter the time to run the load in HHMM format. If nothing is entered the load will occur in background mode.
3) Enter the printer to send the error report to. List of Values is available.
4) Press <F10> to start the load process.
   a) If 'B' was selected, the screen will clear, and the job number will be displayed. Press <Enter> to return to the form.
   b) If '0' was selected, the screen will clear, and processing messages will appear on the screen. When the processing is
completed, you will see "Press RETURN to return to SQL*Forms". Press <Enter> to return to the form. The statistics of the load will be displayed in the lower block.

UNIT TEST CHECKLIST

( ) Module Help

---------

( ) Show Version : Shift-F10
( ) Comment/Bug : Shift-F3
( ) Fast Access : F5
( ) Back : F4 or Esc
( ) Main Menu : Shift-F4
( ) Key Template : Ctrl-F1
( ) Context Prnt : F11
( ) Query Prnt : Ctrl-F11
( ) Oracle Prnt : Shift-F11

TEST PLAN

Testing of the transaction is performed at four levels:
1. Developer testing.
2. Secondary testing.
3. End user testing.
4. Production release & verification.

As each applicable section of this test plan is completed, the designated individual responsible for the section will sign the plan in the appropriate places. Each check off item will be completed. The status of the transaction will be updated in the data dictionary as it progresses through the development and test steps.

Developer Testing

As each individual transaction is generated, the developer performs tests against the transaction to ensure that it meets specifications and works properly. Upon successful completion of this testing, the transaction is made available for secondary testing.

Test status conditions are:

1. Transaction under development, untested.
2. Transaction added to menu and security.
3. Transaction moved to development directory (addmod).
4. Development complete, initial unit testing in progress.
5. Help added
Unit Test checklist completed.
Specific test plan added (if needed).
Any bugs found in Unit test fixed.
Updated test booklet printed.

( ) 3 - Initial unit testing complete.
Developer ______________ Date Complete

Secondary Testing

Secondary testing is performed by a person external to the development team. Tests are performed using a standardized test checklist. Initial testing is performed to ensure that the transaction meets the functional requirements of the transaction and satisfies the test plan narrative that follows.

(✓) 4 - Secondary testing in progress.
(✓) 5 - Secondary testing complete, problems found. Resolution in progress.
(✓) 6 - Problem resolution complete.
(✓) 8 - Secondary testing complete, no problems found. 

Tester ______________ Date Complete 8/8/93

When problems are found:

1. The tester passes the checklist to the project manager for review and action.
2. The project manager assigns the checklist to the developer of the transaction for correction of the problems.
3. The developer corrects the described problems, records the corrective actions taken and the number of hours of corrective effort used, tests the transaction for correct operation, and returns the checklist to the project manager.
4. The project manager returns the checklist to the tester for retesting.

The above sequence of events repeats until the tester signs off the transaction as passing the test requirements.

End User Testing

The transaction is tested by end users for a predetermined time period. This testing is done in the development environment. If no problems are encountered, or all problems are resolved at the end of this time period, the module is ready for Project Manager review.

( ) 9 - End User testing in progress.
( ) 10 - Problem found, resolution in progress.
( ) 11 - Problem resolution complete.
( ) 12 - Resolution verified.

Developer ______________ Date Complete
Tester ______________ Date Complete

3

326
Production Status

( ) 13 - Ready for Project Manager/System Architect review.

( ) The Project Manager or System Architect reviews all test results and determines that the transaction has completed testing.

Architect/Manager Date Complete 5/16/93

( ) 14 - The transaction is ready to be placed into production.

( ) Software files moved to production directory.

( ) Transaction added to production menu.

( ) Transaction access given to production roles.

( ) Validation test performed in production.

( ) Production documentation up to date.

( ) 15 - The transaction has been put into production

By Date Done 5/18/93

Module Test Plan

( ) Display transaction help. Verify that the narrative adequately describes the purpose and functions of the transaction in end-user terms.

( ) Transaction help describes:

( ) Purpose of the transaction

( ) Functions performed by the transaction

( ) Where multiple block, what happens in each block.

Block Title: Laboratory Data Loading Options
Block Table:
Block Usage: Control

Block Test Plan

( ) Attempt to insert a record. An error should result.

( ) Attempt to delete a record. An error should result.

( ) Verify that the data load occurs when <F10> is pressed:

( ) The screen should clear, and various messages appear.

( ) When the process is complete, the bottom block should have data queried into it.

( ) A data loader error report should be printed at your default printer.

Field Prompt: Perform data load
Field Usage: Updatable

Field Test Plan

4

327
Display column help. Verify that the narrative is adequate.

Attempt to delete an existing data field value. An error should result when attempting to leave the field or pressing commit.

Use the space bar to delete the data field.

Use F8 to delete the data field.

Enter a valid value.

Enter an invalid value. An error should result.

Verify that when 'B' is entered, the cursor moves to the 'If batch, when to run' field.

Verify that when '0' is entered the cursor skips the 'when' field.

Field Prompt: If batch, when to run
Field Usage: Updateable

Field Test Plan

Display column help. Verify that the narrative is adequate.

Enter a valid value (ie between 0000 and 2359)

Enter an invalid value. An error should result.

Enter a character value.

Enter an invalid number. (does not match a time)

Field Prompt: Printer to send report to
Field Usage: Updateable

Field Test Plan

Display column help. Verify that the narrative is adequate.

Enter a valid value.

Enter an invalid value. An error should result.

Use LOV to select a valid value.

Accept the default value.

Attempt to delete an existing data field value. An error should result when attempting to leave the field or pressing commit.

Use the space bar to delete the data field.

Use F8 to delete the data field.
Programmer's Bug Report

Liquid Effluent Monitoring Information System

Transaction: LE4220U1 Insert laboratory data into LEMIS

---

Comment ID: 1064 Priority: LOW Date: 06-MAY-93

Status: HANDLED Date: 07-MAY-93 Class:

Type: PROBLEM

Assigned To: KEN ATKINS

Entered By: LORRAINE CAMPBELL

System ID:

Oracle ROWID:

Last Error: -0

Last Msg: FRM-40352 Last row of query retrieved.

Table:

Block: PARAMS

Field: PARAMS.SUBMIT_TIME

DESCRIPTION

---------------------------

help states field is mandatory and a blank is not allowed. Trans help
states field can be left empty and run in background. Field will
allow a blank.

CORRECTIVE ACTION

---------------------------

5/7/93 - Help has been fixed.
LE4251U1 ENTER MISSING METHODS FOR ORGANIC

1.11 LE4251U1 ENTER MISSING METHODS FOR ORGANIC

LEMIS Module Test Checklist Report

Name: ENTER MISSING METHODS FOR ORGANIC
Short Name: LE4251U1
Purpose: To enter the methods for organic loaded data

Initial Test Date: 5/9/93
Verification Date: 5/9/93

Module Description
------------------
This form is used to enter missing method identifiers for loaded data.

Module Help
---------
This transaction is used to enter method ids for loaded data that did not include the method.

To enter methods for the loaded data for a SAF:

1) If "Enter a query; press Shift-F12 to execute" does not appear at the bottom of the screen press <F12> to enter query mode.
2) Enter the SAF ID or SAP ID for the SAF(s) you wish to work with and press <Shift-F12>
3) Press <PageDown> to query the loaded records with missing methods for this SAF. If there are missing methods for this SAF the cursor will move to the second block.
4) Enter the methods for the listed sample numbers. The cursor keys may be used to move between the methods.
5) If needed a list of constituents loaded for the sample can be displayed by pressing <PageDown>. Press <PageUp> to return to the header block.
UNIT TEST CHECKLIST

( ) Module  Function Key

( ) Show Version : Shift-F10 :
( ) Comment/Bug : Shift-F3 :
( ) Fast Access : F5 :
( ) Back : F4 or Esc :
( ) Main Menu : Shift-F4 :
( ) Key Template : Ctrl-F1 :
( ) Context Print : F11 :
( ) Query Print : Ctrl-F11 :
( ) Oracle Print : Shift-F11 :

( ) Block Title: Sample Schedule
( ) Block Table: SAMPLE_SCHEDULE

( ) Help : F1  :  ( ) Key Help : Shift-F1 :
( ) Online Doc : F2  :  ( ) Dis Journal : Shift-F2 :
( ) Related Data : F3  :  ( ) Edit Text : F7 :
( ) Spec Func 1 : Shift-F5  :  ( ) Spec Func 2 : Ctrl-F5 :
( ) Home/End : Home/End :  ( ) Prv/Nxt Block: PgDn/PgUp:
( ) Scroll Up/Dn : Shift-Up/Dn :  ( ) Prv/Nxt Field: Tab/Sh-Tb:
( ) Prv/Nxt Rec : Up/Down :  ( ) Commit Form : F10 :
( ) Clear Field : F8  :  ( ) Clear Record : Shift-F8 :
( ) Clear Form : Shift-F8  :  ( ) Exit System : Ctrl-F4 :
( ) Enter Query : F12 :  ( ) Count Query : Ctrl-F12 :
( ) Correct Query Fields? : Uppercase and LOVs? :
( ) Execute Qry : Shift-F12 : Correct Query Order? :

( ) Block Title: Loader Organic Header
( ) Block Table: LDR_HDR_010

( ) Help : F1  :  ( ) Key Help : Shift-F1 :
( ) Online Doc : F2  :  ( ) Dis Journal : Shift-F2 :
( ) Related Data : F3  :  ( ) Edit Text : F7 :
( ) Spec Func 1 : Shift-F5  :  ( ) Spec Func 2 : Ctrl-F5 :
( ) Home/End : Home/End :  ( ) Prv/Nxt Block: PgDn/PgUp:
( ) Scroll Up/Dn : Shift-Up/Dn :  ( ) Prv/Nxt Field: Tab/Sh-Tb:
( ) Prv/Nxt Rec : Up/Down :  ( ) Commit Form : F10 :
( ) Clear Field : F8  :  ( ) Clear Record : Shift-F8 :
( ) Clear Form : Shift-F8  :  ( ) Exit System : Ctrl-F4 :
( ) Enter Query : F12 :  ( ) Count Query : Ctrl-F12 :
( ) Correct Query Fields? : Uppercase and LOVs? :
( ) Execute Qry : Shift-F12 : Correct Query Order?
Testing of the transaction is performed at four levels:

1. Developer testing.
2. Secondary testing.
3. End user testing.
4. Production release & verification.

As each applicable section of this test plan is completed, the designated individual responsible for the section will sign the plan in the appropriate places. Each check off item will be completed. The status of the transaction will be updated in the data dictionary as it progresses through the development and test steps.

Developer Testing

As each individual transaction is generated, the developer performs tests against the transaction to ensure it meets specifications and works properly. Upon successful completion of this testing, the transaction is made available for secondary testing.

Test status conditions are:

1. Transaction under development, untested.
2. Transaction moved to development directory (addmod).
3. Development complete, initial unit testing in progress.
4. Help added
5. Unit Test checklist completed.
6. Specific test plan added (if needed).
WHC-SD-WM-TP-169 REV 0

( ) Any bugs found in Unit test fixed.
( ) Updated test booklet printed.
( ) 3 - Initial unit testing complete.
    Developer _____________ Date Complete ______

Secondary Testing

Secondary testing is performed by a person external to the development team. Tests are performed using a standardized test checklist. Initial testing is performed to ensure that the transaction meets the functional requirements of the transaction and satisfies the test plan narrative that follows.

( ) 4 - Secondary testing in progress.
( ) 5 - Secondary testing complete, problems found. Resolution in progress.
( ) 6 - Unable to resolve problem at this time.
( ) 8 - Secondary testing complete, no problems found.
    Tester _____________ Date Complete 8/14/83

When problems are found:

1. The tester passes the checklist to the project manager for review and action.
2. The project manager assigns the checklist to the developer of the transaction for correction of the problems.
3. The developer corrects the described problems, records the corrective actions taken and the number of hours of corrective effort used, tests the transaction for correct operation, and returns the checklist to the project manager.
4. The project manager returns the checklist to the tester for retesting.

The above sequence of events repeats until the tester signs off the transaction as passing the test requirements.

End User Testing

The transaction is tested by end users for a predetermined time period. This testing is done in the development environment. If no problems are encountered, or all problems are resolved at the end of this time period, the module is ready for Project Manager review.

( ) 9 - End User testing in progress.
( ) 10 - Problem found, resolution in progress.
( ) 11 - Problem resolution complete.
    Developer _____________ Date Complete ______
    Tester _____________ Date Complete ______
( ) 12 - Resolution verified.

Production Status

333
13 - Ready for Project Manager/System Architect review.

14 - The Project Manager or System Architect reviews all test results and determines that the transaction has completed testing.

Architect/Manager: A
Date Complete: 5/14/93

15 - The transaction is ready to be placed into production.

By: A
Date Done: 5/19/93

Module Test Plan

Display transaction help. Verify that the narrative adequately describes the purpose and functions of the transaction in end-user terms.

Transaction help describes:

- Purpose of the transaction
- Functions performed by the transaction
- Where multiple block, what happens in each block.

Block Title: Sample Schedule
Block Table: SAMPLE_SCHEDULE
Block Usage: Query Only

Block Help

This table is used to query sampling schedule information. It contains information about the SAP and the SAF that is relevant to sample scheduling.

Block Test Plan

Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms.

Block help describes:

- Purpose of the block
Block Test Plan

Options available in the block
The relationship of the block to the transaction or to the principal parent block of the transaction
Navigation to other blocks of the transaction

Where block synchronization is used, ensure that the block data is in sync with the parent block. No Block Sync

Query a single record:
- A single record is retrieved.
- Pressing the F12 key clears the record and permits entering a second query.
- The second query successfully retrieves the desired data.

Query multiple records using wild cards:
- Pressing F12 clears the block and makes the block ready for a query.
- A query composed of a trailing % wildcard retrieves the desired data.
- A query using a prefix % wildcard retrieves the correct data.
- A query using both prefix and suffix % wildcards retrieves the correct data.
- A query using the underscore (_) position wildcard retrieves the correct data.

Verify that the data queries in the block are ordered logically.

Attempt to delete a record. An error should occur.

Field Prompt: SAP ID
Field Usage: Queryable Only
Field Name: IDENT SAP
Field Help

This field uniquely identifies the responsible SAP for this sample schedule.

Field Test Plan

Enter query mode and verify that this field is accessible.

Enter query mode and enter a valid value in this field.
Only records matching the entered value should be displayed.
Field Prompt: Title
Field Usage: Non Updateable
Field Name: TITLE_SAP

Field Help
-------------------------------------------------------------------
This is a 1-40 character descriptive title for the SAP.

Field Test Plan
-------------------------------------------------------------------

(✔) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

(✔) Attempt to change data in the field. An error should result.
   (✔) Use the spacebar to attempt to change data.
   (✔) Use the clear field key (F8) to attempt to change data.

(✔) Attempt to delete data in the field. An error should result.
   (✔) Use the spacebar to attempt to delete data.
   (✔) Use the clear field key (F8) to attempt to delete data.

(✔) Enter query mode and verify that this field is accessible.

(✔) Enter query mode and enter a valid value in this field.
   (✔) Only records matching the entered value should be displayed.
Field Prompt: SAF ID
Field Usage: Non Updateable
Field Name: IDENT_SAF

Field Help

This field uniquely identifies the SAF for the database. It is entered when the SAF was created in the database.

Field Test Plan

( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Attempt to change data in the field. An error should result.
   ( ) Use the spacebar to attempt to change data.
   ( ) Use the clear field key (F8) to attempt to change data.

( ) Attempt to delete data in the field. An error should result.
   ( ) Use the spacebar to attempt to delete data.
   ( ) Use the clear field key (F8) to attempt to delete data.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.
Block Title: Loader Organic Header
Block Table: LDR HDR 010
Block Usage: Update Only

Block Help
This table stores organic laboratory data that has been loaded into but no inserted into the LEMIS database.

Block Test Plan

( ) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

( ) Block help describes:
   ( ) Purpose of the block
   ( ) Options available in the block
   ( ) The relationship of the block to the transaction or to the principal parent block of the transaction
   ( ) Navigation to other blocks of the transaction

( ) Where block synchronization is used, ensure that the block data is in sync with the parent block.

( ) Query a single record:
   ( ) A single record is retrieved.
   ( ) Pressing the F12 key clears the record and permits entering a second query.
   ( ) The second query successfully retrieves the desired data.

( ) Query multiple records using wild cards:
   ( ) Pressing F12 clears the block and makes the block ready for a query.
   ( ) A query composed of a trailing % wildcard retrieves the desired data.
   ( ) A query using a prefix % wildcard retrieves the correct data.
   ( ) A query using both prefix and suffix % wildcards retrieves the correct data.
   ( ) A query using the underscore (_) position wildcard retrieves the correct data.

( ) Verify that the data queries in the block are ordered logically.

( ) Update a record:
   ( ) The change count should increment.
   ( ) The date updated should become the current date.
An error should occur if the operator owner identifier does not match the data owner identifier.

( ) Attempt to delete a record. An error should occur.

Field Prompt: Sample Number
Field Usage: Queryable Only
Field Name: SAMPLE_NO

Field Help

Field Test Plan

( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.

Field Prompt: Lab File ID
Field Usage: Queryable Only
Field Name: LAB_FILE_ID

Field Help

Field Test Plan

( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.

Field Prompt: Date Analyzed
Field Usage: Queryable Only
Field Name: DATE_ANALYZED

Field Help

Field Test Plan

( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.
Field Prompt: Method ID  
Field Usage: Updateable  
Field Name: IDENT\_METHOD

---

Field Help

The laboratory Method identifier for this loaded header record.  
Use list of values to see valid methods for this SAP.

---

This field:
- Allows any valid character combination.
- Converts all entry to uppercase.

---

Field Test Plan

(✓) Verify that the field accepts character or numeric data within
the limits imposed by validation criteria.

(✓) Enter data beyond the length of the field:
  (✓) If autoskip is in effect, cursor will skip to the next field.
  (✓) If no autoskip, cursor will remain at the end of the field and
overlay characters, leaving the last character keyed in the
last position of the field.

(✓) Display column help. Verify that the narrative adequately
describes the column's purpose and functions in end-user terms.

(✓) Change the field in an existing record. Verify that the change
occurred by displaying the record on the screen before and after
the changes were made.

(✓) Change the field, committing after each change.

(✓) Change the field where a range of valid values exists:
  (✓) Value below valid range should display message COM00101 or
   COM00103 (if no LOV).
  (✓) Value above valid range should display message COM00101 or
   COM00103 (if no LOV).
  (✓) Minimum value within the range should be accepted.
  (✓) Maximum value within the range should be accepted.
  (✓) Random value within the range should be accepted.

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.
  (✓) Only records matching the entered value should be displayed.

(✓) Skip the field using the TAB key.

(✓) Enter data into the field, backspace the data out of the field
and TAB to the next field. The database should contain a null
value.
Delete an existing value. The field should be cleared and stored:

( ) Delete the value using the space bar.
( ) Delete the value using the clear field key (F8).
Block Title: Loader Organic Detail Lines
Block Table: LDR_DET_010
Block Usage: Query Only

Block Help

This table contains organic laboratory information that was loaded from files. This table contains the detail records with a list of constituents and data values.

Block Test Plan

( ) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

( ) Block help describes:

( ) Purpose of the block
( ) Options available in the block
( ) The relationship of the block to the transaction or to the principal parent block of the transaction
( ) Navigation to other blocks of the transaction

( ) Where block synchronization is used, ensure that the block data is in sync with the parent block.

( ) Query a single record:

( ) A single record is retrieved.
( ) Pressing the F12 key clears the record and permits entering a second query.
( ) The second query successfully retrieves the desired data.

( ) Query multiple records using wild cards:

( ) Pressing F12 clears the block and makes the block ready for a query.
( ) A query composed of a trailing % wildcard retrieves the desired data.
( ) A query using a prefix % wildcard retrieves the correct data.
( ) A query using both prefix and suffix % wildcards retrieves the correct data.
( ) A query using the underscore (_) position wildcard retrieves the correct data.

( ) Verify that the data queries in the block are ordered logically.
( ) Attempt to delete a record. An error should occur.
Field Prompt: CAS Number
Field Usage: Queryable Only
Field Name: CAS_NO

Field Help

Field Test Plan

Enter query mode and verify that this field is accessible.

Enter query mode and enter a valid value in this field.
Only records matching the entered value should be displayed.

Field Prompt: Full Name
Field Usage: Queryable Only
Field Name: NAME_CON_LONG

Field Help

This data field:

- Is optional and may be left empty.
- May contain any character combination.
- All input is converted to upper case.

Field Test Plan

Enter query mode and verify that this field is accessible.

Enter query mode and enter a valid value in this field.
Only records matching the entered value should be displayed.
Programmer's Bug Report

Application: LEMIS  Liquid Effluent Monitoring Information System

Transaction: LE4251U1 Enter Methods for Organic Loaded Data

Comment ID: 1065  Priority: LOW  Date: 06-MAY-93

Status: HANDLED  Date: 07-MAY-93  Class: PROBLEM

Assigned To: KEN ATKINS
Entered By: LORRAINE CAMPBELL
System ID: 1000394  Oracle ROWID: 0000080E.0003.0009

Last Error: -0
Last Msg: FRM-40350  Query caused no records to be retrieved.
Table: LDR_HDR-010
Block: LDH010
Field: LDH010.IDENT_METHOD

DESCRIPTION:

block help is not very clear

CORRECTIVE ACTION:

5/7/93 - I noticed a spelling problem and I have fixed it. This help should be adequate because this is a temporary transaction.
LEMIS Module Test Checklist Report

Name: ENTER MISSING METHODS FOR INORG
Short Name: LE4252U1
Purpose: To enter the methods for inorganic loaded data

Initial Test Date: 5/7/93
Verification Date: 5/7/93

Module Description
------------------
This form is used to enter missing method identifiers for loaded data.

Module Help
------------
This transaction is used to enter method ids for loaded data that did not include the method.

To enter methods for the loaded data for a SAF:

1) If "Enter a query; press Shift-F12 to execute" does not appear at the bottom of the screen press <F12> to enter query mode.
2) Enter the SAF ID or SAP ID for the SAF(s) you wish to work with and press <Shift-F12>
3) Press <PageDown> to query the loaded records with missing methods for this SAF. If there are missing methods for this SAF the cursor will move to the second block.
4) Enter the methods for the listed sample numbers and constituents. The cursor keys may be used to move between the methods.
UNIT TEST CHECKLIST

( ) Module  Function Key

( ) Show Version : Shift-F10 :
( ) Comment/Bug : Shift-F3 :
( ) Fast Access : F5 :
( ) Back : F4 or Esc :
( ) Main Menu : Shift-F4 :
( ) Key Template : Ctrl-F1 :
( ) Context Prnt : F11 :
( ) Query Prnt : Ctrl-F11 :
( ) Oracle Prnt : Shift-F11 :

( ) Block Title: Sample Schedule
Block Table: SAMPLE_SCHEDULE

<table>
<thead>
<tr>
<th>Function</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help</td>
<td>F1</td>
</tr>
<tr>
<td>Online Doc</td>
<td>F2</td>
</tr>
<tr>
<td>Related Data</td>
<td>F3</td>
</tr>
<tr>
<td>Spec Func 1</td>
<td>Shift-F5</td>
</tr>
<tr>
<td>Spec Func 2</td>
<td>Ctrl-F5</td>
</tr>
<tr>
<td>Home/End</td>
<td>Home/End</td>
</tr>
<tr>
<td>Prev/Nxt Block</td>
<td>PgDn/PgUp</td>
</tr>
<tr>
<td>Prev/Nxt Field</td>
<td>Tab/Sh-Tb</td>
</tr>
<tr>
<td>Commit Form</td>
<td>F10</td>
</tr>
<tr>
<td>Clear Field</td>
<td>F8</td>
</tr>
<tr>
<td>Clear Record</td>
<td>Shift-F8</td>
</tr>
<tr>
<td>Exit System</td>
<td>Ctrl-F4</td>
</tr>
<tr>
<td>Enter Query</td>
<td>F12</td>
</tr>
<tr>
<td>Correct Query Fields?</td>
<td>Uppercase and LOVs?</td>
</tr>
<tr>
<td>Correct Query Order?</td>
<td></td>
</tr>
</tbody>
</table>

( ) Block Title: Loader Inorganic Detail Lines
Block Table: LDR_DET_011

<table>
<thead>
<tr>
<th>Function</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help</td>
<td>F1</td>
</tr>
<tr>
<td>Online Doc</td>
<td>F2</td>
</tr>
<tr>
<td>Related Data</td>
<td>F3</td>
</tr>
<tr>
<td>Spec Func 1</td>
<td>Shift-F5</td>
</tr>
<tr>
<td>Spec Func 2</td>
<td>Ctrl-F5</td>
</tr>
<tr>
<td>Home/End</td>
<td>Home/End</td>
</tr>
<tr>
<td>Prev/Nxt Block</td>
<td>PgDn/PgUp</td>
</tr>
<tr>
<td>Prev/Nxt Field</td>
<td>Tab/Sh-Tb</td>
</tr>
<tr>
<td>Commit Form</td>
<td>F10</td>
</tr>
<tr>
<td>Clear Field</td>
<td>F8</td>
</tr>
<tr>
<td>Clear Record</td>
<td>Shift-F8</td>
</tr>
<tr>
<td>Exit System</td>
<td>Ctrl-F4</td>
</tr>
<tr>
<td>Enter Query</td>
<td>F12</td>
</tr>
<tr>
<td>Correct Query Fields?</td>
<td>Uppercase and LOVs?</td>
</tr>
<tr>
<td>Correct Query Order?</td>
<td></td>
</tr>
</tbody>
</table>
TEST PLAN

Testing of the transaction is performed at four levels:

1. Developer testing.
2. Secondary testing.
3. End user testing.
4. Production release & verification.

As each applicable section of this test plan is completed, the designated individual responsible for the section will sign the plan in the appropriate places. Each check off item will be completed. The status of the transaction will be updated in the data dictionary as it progresses through the development and test steps.

Developer Testing

As each individual transaction is generated, the developer performs tests against the transaction to insure that it meets specifications and works properly. Upon successful completion of this testing, the transaction is made available for secondary testing.

Test status conditions are:

- (✓) 1 - Transaction under development, untested.
- (✓) 2 - Transaction added to menu and security.
- (✓) 3 - Transaction moved to development directory (addmod).
- (✓) 4 - Development complete, initial unit testing in progress.
- (✓) 5 - Help added
- (✓) 6 - Unit Test checklist completed.
- (✓) 7 - Specific test plan added (if needed).
- (✓) 8 - Any bugs found in Unit test fixed.
- (✓) 9 - Updated test booklet printed.
- (✓) 10 - Initial unit testing complete.

Secondary Testing

Secondary testing is performed by a person external to the development team. Tests are performed using a standardized test checklist. Initial testing is performed to ensure that the transaction meets the functional requirements of the transaction and satisfies the test plan narrative that follows.

- (✓) 4 - Secondary testing in progress.
- (✓) 5 - Secondary testing complete, problems found. Resolution in progress.
- (✓) 6 - Unable to resolve problem at this time.
- (✓) 7 - Problem resolution complete.
- (✓) 8 - Secondary testing complete, no problems found.

Date Complete 5/10/93
When problems are found:

1. The tester passes the checklist to the project manager for review and action.
2. The project manager assigns the checklist to the developer of the transaction for correction of the problems.
3. The developer corrects the described problems, records the corrective actions taken and the number of hours of corrective effort used, tests the transaction for correct operation, and returns the checklist to the project manager.
4. The project manager returns the checklist to the tester for retesting.

The above sequence of events repeats until the tester signs off the transaction as passing the test requirements.

End User Testing

The transaction is tested by end users for a predetermined time period. This testing is done in the development environment. If no problems are encountered, or all problems are resolved at the end of this time period, the module is ready for Project Manager review.

( ) 9 - End User testing in progress.
( ) 10 - Problem found, resolution in progress.
( ) 11 - Problem resolution complete.
      Developer ___________________ Date Complete ______
( ) 12 - Resolution verified.
      Tester ___________________ Date Complete ______

Production Status

( ) 13 - Ready for Project Manager/System Architect review.
      The Project Manager or System Architect reviews all test results and determines that the transaction has completed testing.
      Architect/Manager ___________________ Date Complete ______

( ) 14 - The transaction is ready to be placed into production.
      Software files moved to production directory.
      Transaction added to production menu.
      Transaction access given to production roles.
      Validation test performed in production.
      Production documentation up to date.

( ) 15 - The transaction has been put into production
      By ___________________ Date Done ______
Display transaction help. Verify that the narrative adequately describes the purpose and functions of the transaction in end-user terms.

Transaction help describes:

- Purpose of the transaction
- Functions performed by the transaction
- Where multiple block, what happens in each block.

Block Title: Sample Schedule
Block Table: SAMPLE SCHEDULE
Block Usage: Query Only

Block Help

This table is used to query sampling schedule information. It contains information about the SAP and the SAF that is relevant to sample scheduling.

Block Test Plan

Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

- Purpose of the block
- Options available in the block
- The relationship of the block to the transaction or to the principal parent block of the transaction
- Navigation to other blocks of the transaction

Where block synchronization is used, ensure that the block data is in sync with the parent block.

Query a single record:

- A single record is retrieved.
- Pressing the F12 key clears the record and permits entering a second query.
- The second query successfully retrieves the desired data.

Query multiple records using wild cards:

- A query composed of a trailing % wildcard retrieves the
desired data.

(*) A query using a prefix % wildcard retrieves the correct data.
(*) A query using both prefix and suffix % wildcards retrieves the correct data.
(*) A query using the underscore (_) position wildcard retrieves the correct data.

(*) Verify that the data queries in the block are ordered logically.

Field Prompt: SAP ID
Field Usage: Queryable Only
Field Name: IDENT_SAP

Field Help
This field uniquely identifies the responsible SAP for this sample schedule.

Field Test Plan

(*) Enter query mode and verify that this field is accessible.

(*) Enter query mode and enter a valid value in this field.
\(\) Only records matching the entered value should be displayed.

Field Prompt: Title
Field Usage: Non Updateable
Field Name: TITLE_SAP

Field Help
This is a 1-40 character descriptive title for the SAP.

Field Test Plan

(*) Enter query mode and verify that this field is accessible.

(*) Enter query mode and enter a valid value in this field.
\(\) Only records matching the entered value should be displayed.
Field Prompt: SAF ID
Field Usage: Non Updateable
Field Name: IDENT_SAF

Field Help

This field uniquely identifies the SAF for the database. It is entered when the SAF was created in the database.

Field Test Plan

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.
   (✓) Only records matching the entered value should be displayed.
Block Title: Loader Inorganic Detail Lines
Block Table: LDR DET 011
Block Usage: Update Only

Block Help

This table stores inorganic laboratory data that has been loaded into the system, but not inserted into the LEMIS database.

Block Test Plan

Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

- Purpose of the block
- Options available in the block
- The relationship of the block to the transaction or to the principal parent block of the transaction
- Navigation to other blocks of the transaction

Where block synchronization is used, ensure that the block data is in sync with the parent block.

Query a single record:

- A single record is retrieved.
- Pressing the F12 key clears the record and permits entering a second query.
- The second query successfully retrieves the desired data.

Query multiple records using wild cards:

- Pressing F12 clears the block and makes the block ready for a query.
- A query composed of a trailing % wildcard retrieves the desired data.
- A query using a prefix % wildcard retrieves the correct data.
- A query using both prefix and suffix % wildcards retrieves the correct data.
- A query using the underscore (_) position wildcard retrieves the correct data.

Verify that the data queries in the block are ordered logically.

Update a record:

- The change count should increment.
- The date updated should become the current date.
An error should occur if the operator owner identifier does not match the data owner identifier.

Field Prompt: AS
Field Usage: Queryable Only
Field Name: ANALYTE_SYMBOL

Field Test Plan

Enter query mode and verify that this field is accessible.

Enter query mode and enter a valid value in this field.

Only records matching the entered value should be displayed.

This data field:
- Is optional and may be left empty.
- May contain any character combination.
- All input is converted to upper case.

Field Test Plan

Enter query mode and verify that this field is accessible.

Enter query mode and enter a valid value in this field.

Only records matching the entered value should be displayed.
Field Prompt: Full Name
Field Usage: Queryable Only
Field Name: NAME_CON_LONG

Field Help

This data field:
- Is optional and may be left empty.
- May contain any character combination.
- All input is converted to upper case.

Field Test Plan

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.
Field Prompt: Method ID
Field Usage: Updateable
Field Name: IDENT-METHOD

Field Help

The laboratory Method identifier for this loaded detail record.
Use list of values to see valid methods for this SAP.

This field:
- Allows any valid character combination.
- Converts all entry to uppercase.

Field Test Plan

( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
  ( ) If autoskip is in effect, cursor will skip to the next field.
  ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field. Only records matching the entered value should be displayed.

( ) Skip the field using the TAB key.

( ) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

( ) Delete an existing value. The field should be cleared and stored:
  ( ) Delete the value using the space bar.
  ( ) Delete the value using the clear field key (F8).
Programmer's Bug Report

Application: LEMIS  Liquid Effluent Monitoring Information System

Transaction: LE4252U1 Enter Methods for Inorganic Loaded Data

Transaction ID: 1066  Priority: LOW  Date: 07-MAY-93

Status: HANDLED  Assigned To: KEN ATKINS

Entered By: LORRAINE CAMPBELL

System ID: 92000011087  Oracle ROWID:

Last Error: 0

Last Msg: FRM-40811  Shell command had error.

Table: SAMPLE_SCHEDULE  Block: SS  Field: SS.IDENT_SAF

DESCRIPTION

Spelling error 1) query for both organic trans help and inorganic trans help

CORRECTIVE ACTION

5/7/93 - Help has been fixed.
Application: LEMIS  Liquid Effluent Monitoring Information System

Transaction: LE4252U1 Enter Methods for Inorganic Loaded Data

Status : HANDLED  Date: 07-MAY-93  Class: PROBLEM
Assigned To:  KEN ATKINS
Entered By :  LORRAINE CAMPBELL
System ID :  92000011087  Oracle ROWID:
Last Error :  -0
Last Msg :  FRM-40400  Transaction complete -- 2 records posted an
Table :  SAMPLE_SCHEDULE
Block :  SS
Field :  SS.IDENT_SAF

DESCRIPTION
block help spelling error--relavant should be relevant

CORRECTIVE ACTION
5/7/93 - Help has been fixed.
Programmer's Bug Report

Application: LEMIS Liquid Effluent Monitoring Information System

Transaction: LE4252U1 Enter Methods for Inorganic Loaded Data

Comment ID : 1068  Priority: LOW  Date: 07-MAY-93
------------------------------
Status       : HANDLED  Date: 07-MAY-93  Class:
Type         : PROBLEM
Assigned To  : KEN ATKINS
Entered By   : LORRAINE CAMPBELL
System ID    : 1000057  Oracle ROWID: 0000070F.002F.0009
Last Error   : -0
Last Msg     : FRM-40350 Query caused no records to be retrieved.
Table        : LDR DET_01I
Block        : LDDO1I
Field        : LDD01I.IDENT-METHOD

DESCRIPTION
---------------------------------------------------------------
when entering info from keyboard in lower case field does not automatically change to uppercase

CORRECTIVE ACTION
---------------------------------------------------------------
5/7/93 - Has been fixed.
LEMIS Module Test Checklist Report

Name: VERIFY RESULTS
Short Name: LE4310U1
Purpose: To verify result information.

Initial Test Date: 3/19/93
Verification Date: 3/23/93

Module Description
-------------
This module is used to store and maintain constituent results information. The form is two pages long and consists of three blocks.

To enter constituent results data:

1) Enter the HEIS number and press <shift-F12>. The associated laboratory will appear.

2) Press <Page Down> to create Results of Sample Analysis Records in the following block and to move your cursor to the DATE EXTRACTED field in that block. The REQ NUM, ANALYSIS CLASS, and METHOD fields are query only and cannot be changed.

3) Enter the Date Extracted and Date Analysis. Both of these fields are optional.

4) If desired, you may press <F7> to add any associated text for each request line number. If you choose this option, the TEXT? field will change from "N" to "Y" after you have committed the text.

5) Press the <Page Down> key to move to page 2 of the form where you will find the associated constituents for the analysis class and method that you chose on page 1. Your cursor will be in the

1

359
Module Description
------------------
Concentration Value field. Cas Id and Constituent Id are query only fields and may not be modified.

6) Enter the Concentration Value and press <Tab> to move to the next field.

7) The Unit of Measure field will contain a default value. You may leave it as it is or change it. A LOV (list of values) is available by pressing <F9>. Press tab to move to the next field.

8) The Qualifier field is defaulted to "UJ". You may leave it as it is or change it by entering a valid value or pressing <F9> for the list of values.

9) You may add associated text for this each record by pressing <F7>. If you chose this option and commit your text, the Txt? field will change from "N" to "Y".

10) Use <Down arrow> to move through the list of constituents. As you move down through the constituent list, the Qualifier field will change from blank to "UJ". This is to signify that you have addressed this record so that if you leave this function and return at a later date, you will know by looking at the Qualifier column which records you have already updated.

11) Press <F10> to commit your changes.

Module Help
----------
This transaction is used to enter data to verify the data loaded from datafiles. A certain percentage of the loaded data should be entered by hand to verify the accuracy of the loaded data.

To enter validation data:

1) If "Enter a query; press Shift-F12 to execute, Esc to cancel" does not appear on the bottom of the screen, Press <F12> to enter query mode.

2) Enter the HEIS number and press <shift-F12>. The associated laboratory and purpose will appear.

3) Press <Page Down> to move to the Results block.

4) Enter the Method number. List of Values may be used to select the method. Only methods that were defined for this SAF will appear. Use the following steps to use List of Values:
   a) Press <F9> to bring up List of Values popup.
   b) Use the arrow keys to highlight the desired method

OR

1. Press <Tab> to move the cursor to the "Find" field.
2. Enter '%' followed by the method title string desired. Only
Module Help
--------

part of the method title needs to be entered.

3. Press <Tab> to see the results of the find.

   c) With the desired record highlighted press <Enter> to retrieve
      the method.

5) Enter the Extract Date, Date Analyzed, and Units.
6) Press the <Page Down> key to move to the constituents block.
7) Enter the CAS ID for this constituent and press <Enter>. The
   Full name of the constituent should appear. List of Values is
   available. The constituent must be a valid constituent for this
   method.
8) Enter the Concentration Value and press <Enter>.
9) The Qualifier field is defaulted to "UJ". You may leave it as it
   is or change it by entering a valid value or pressing <F9> for the
   list of values.
10) Press the down arrow key to enter another constituent for this
    method.
11) When all desired constituents are entered, press <F10> to commit
    your data.

UNIT TEST CHECKLIST

( ) Module  Function Key
-------------
   Show Version : Shift-F10 :
   Comment/Bug : Shift-F3 :
   Fast Access : F5 :
   Back : F4 or Esc :
   Main Menu : Shift-F4 :
   Key Template : Ctrl-F1 :
   Context Pnt : F11 :
   Query Print : Ctrl-F11 :
   Oracle Print : Shift-F11 :

( ) Block Title: Sample
Block Table: SAMPLE

( ) Help : F1 : ( ) Key Help : Shift-F1 :  
( ) Online Doc : F2 : ( ) Dis Journal : Shift-F2 :
( ) Related Data : F3 : ( ) Edit Text : F7 :
( ) Spec Func 1 : Shift-F5 : ( ) Spec Func 2 : Ctrl-F5 :

( ) Home/End : Home/End : ( ) Prv/Nxt Block: PgDn/PgUp:
( ) Scroll Up/Dn : Shift-Up/Dn : ( ) Prv/Nxt Field: Tab/Sh-Tb:
( ) Prv/Nxt Rec : Up/Down : ( ) Commit Form : F10 :

( ) Clear Field : F8 : ( ) Clear Record : Shift-F8 :
( ) Execute Qry : Shift-F12 : ( ) Correct Query Order? :
Block Title: Results of Sample Analysis
Block Table: RESULTS

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Help</td>
<td>F1</td>
<td>Key Help</td>
<td>Shift-F1</td>
</tr>
<tr>
<td>Online Doc</td>
<td>F2</td>
<td>Disk Journal</td>
<td>Shift-F2</td>
</tr>
<tr>
<td>Related Data</td>
<td>F3</td>
<td>Edit Text</td>
<td>F7</td>
</tr>
<tr>
<td>Spec Func 1</td>
<td>Shift-F5</td>
<td>Spec Func 2</td>
<td>Ctrl-F5</td>
</tr>
<tr>
<td>Home/End</td>
<td>Home/End</td>
<td>Prv/Nxt Block</td>
<td>PgDn/PgUp</td>
</tr>
<tr>
<td>Scroll Up/Dn</td>
<td>Shift-Up/Dn</td>
<td>Prv/Nxt Field</td>
<td>Tab/Sh-Tb</td>
</tr>
<tr>
<td>Prv/Nxt Rec</td>
<td>Up/Down</td>
<td>Commit Form</td>
<td>F10</td>
</tr>
</tbody>
</table>

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear Field</td>
<td>F8</td>
<td>Clear Record</td>
<td>Shift-F8</td>
</tr>
<tr>
<td>Clear Form</td>
<td>Shift-F8</td>
<td>Exit System</td>
<td>Ctrl-F4</td>
</tr>
</tbody>
</table>

Enter Query | F12 | Count Query | Ctrl-F12 |
Correct Query Fields | Uppercase and LOVs |
Execute Qry | Shift-F12 | Correct Query Order |

Insert Rec | Insert | Add record at end |
Mandatory checks OK | Validation checks OK |
List of Values OK | DuplicateFld | Shift-F6 |
Duplicate Rec | F6 | Duplicate checks OK |
Optional fields marked | Correct fields uppercase |

Block Title: Constituents Found In Results
Block Table: CONSTITUENT_RESULTS

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Help</td>
<td>F1</td>
<td>Key Help</td>
<td>Shift-F1</td>
</tr>
<tr>
<td>Online Doc</td>
<td>F2</td>
<td>Disk Journal</td>
<td>Shift-F2</td>
</tr>
<tr>
<td>Related Data</td>
<td>F3</td>
<td>Edit Text</td>
<td>F7</td>
</tr>
<tr>
<td>Spec Func 1</td>
<td>Shift-F5</td>
<td>Spec Func 2</td>
<td>Ctrl-F5</td>
</tr>
<tr>
<td>Home/End</td>
<td>Home/End</td>
<td>Prv/Nxt Block</td>
<td>PgDn/PgUp</td>
</tr>
<tr>
<td>Scroll Up/Dn</td>
<td>Shift-Up/Dn</td>
<td>Prv/Nxt Field</td>
<td>Tab/Sh-Tb</td>
</tr>
<tr>
<td>Prv/Nxt Rec</td>
<td>Up/Down</td>
<td>Commit Form</td>
<td>F10</td>
</tr>
</tbody>
</table>

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear Field</td>
<td>F8</td>
<td>Clear Record</td>
<td>Shift-F8</td>
</tr>
<tr>
<td>Clear Form</td>
<td>Shift-F8</td>
<td>Exit System</td>
<td>Ctrl-F4</td>
</tr>
</tbody>
</table>

Enter Query | F12 | Count Query | Ctrl-F12 |
Correct Query Fields | Uppercase and LOVs |
Execute Qry | Shift-F12 | Correct Query Order |

Insert Rec | Insert | Add record at end |
Mandatory checks OK | Validation checks OK |
List of Values OK | Duplicate Fld | Shift-F6 |
Duplicate Rec | F6 | Duplicate checks OK |
Optional fields marked | Correct fields uppercase |
TEST PLAN

Testing of the transaction is performed at four levels:

1. Developer testing.
2. Secondary testing.
3. End user testing.
4. Production release & verification.

As each applicable section of this test plan is completed, the designated individual responsible for the section will sign the plan in the appropriate places. Each check off item will be completed. The status of the transaction will be updated in the data dictionary as the transaction progresses through the development and test steps.

Developer Testing

As each individual transaction is generated, the developer performs tests against the transaction to insure that it meets specifications and works properly. Upon successful completion of this testing, the transaction is made available for secondary testing.

Test status conditions are:

1. Transaction under development, untested.
2. Transaction added to menu and security.
3. Transaction moved to development directory (addmod).
4. Development complete, initial unit testing in progress.
   - Help added
   - Unit Test checklist completed.
   - Specific test plan added (if needed).
   - Any bugs found in Unit test fixed.
   - Updated test booklet printed.
5. Initial unit testing complete.
   [Signature] Date Complete [Y/M/D]

Secondary Testing

Secondary testing is performed by a person external to the development team. Tests are performed using a standardized test checklist. Initial testing is performed to ensure that the transaction meets the functional requirements of the transaction and satisfies the test plan narrative that follows.

1. Secondary testing in progress.
2. Secondary testing complete, problems found. Resolution in progress.
3. Unable to resolve problem at this time.
4. Problem resolution complete.
5. Secondary testing complete, no problems found.

[Signature] Date Complete [Y/M/D]
When problems are found:

1. The tester passes the checklist to the project manager for review and action.
2. The project manager assigns the checklist to the developer of the transaction for correction of the problems.
3. The developer corrects the described problems, records the corrective actions taken and the number of hours of corrective effort used, tests the transaction for correct operation, and returns the checklist to the project manager.
4. The project manager returns the checklist to the tester for retesting.

The above sequence of events repeats until the tester signs off the transaction as passing the test requirements.

End User Testing

The transaction is tested by end users for a predetermined time period. This testing is done in the development environment. If no problems are encountered, or all problems are resolved at the end of this time period, the module is ready for Project Manager review.

( ) 9 - End User testing in progress.
( ) 10 - Problem found, resolution in progress.
( ) 11 - Problem resolution complete.
   Developer __________ Date Complete ______
   Tester ______________ Date Complete ______
( ) 12 - Resolution verified.

Production Status

( ) 13 - Ready for Project Manager/System Architect review.
( ) The Project Manager or System Architect reviews all test results and determines that the transaction has completed testing.
   Architect/Manager _______ Date Complete ______

( ) 14 - The transaction is ready to be placed into production.
   Software files moved to production directory.
   Transaction added to production menu.
   Transaction access given to production roles.
   Validation test performed in production.
   Production documentation up to date.

( ) 15 - The transaction has been put into production

By _______ Date Done _______
Display transaction help. Verify that the narrative adequately describes the purpose and functions of the transaction in end-user terms.

Transaction help describes:
- Purpose of the transaction
- Functions performed by the transaction
- Where multiple block, what happens in each block.

Block Title: Sample
Block Table: SAMPLE
Block Usage: Query Only

Block Help

This block shows the list of samples that have been defined for this sample request. Each sample may be for a different location, and have a different purpose (ie Primary, Blank, Dup).

Block Test Plan

Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

- Purpose of the block
- Options available in the block
- The relationship of the block to the transaction or to the principal parent block of the transaction
- Navigation to other blocks of the transaction

Where block synchronization is used, ensure that the block data is in sync with the parent block.

Query a single record:
- A single record is retrieved.
- Pressing the F12 key clears the record and permits entering a second query.
- The second query successfully retrieves the desired data.

Query multiple records using wild cards:
- Pressing F12 clears the block and makes the block ready for a query.
- A query composed of a trailing % wildcard retrieves the desired data.
- A query using a prefix % wildcard retrieves the correct
(✓) A query using both prefix and suffix % wildcards retrieves the correct data.
(✓) A query using the underscore (_) position wildcard retrieves the correct data.

✓ Verify that the data queries in the block are ordered logically.
✓ Attempt to delete a record. An error should occur.

Field Prompt: HEIS Number
Field Usage: Non Updateable
Field Name: IDENT_SAMPLE

Field Help
This field uniquely identifies the sample to the database.
An error will occur if you attempt to enter a identification value already present in the database.
These records are automatically created with a temporary Sample ID. When the field data is entered, the HEIS number will be entered as the Sample ID.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan
(✓) Display column help. Verify that the narrative adequately describes the column’s purpose and functions in end-user terms.
(✓) Attempt to change data in the field. An error should result.
   (✓) Use the spacebar to attempt to change data.
   (✓) Use the clear field key (F8) to attempt to change data.

(✓) Attempt to delete data in the field. An error should result.
   (✓) Use the spacebar to attempt to delete data.
   (✓) Use the clear field key (F8) to attempt to delete data.

(✓) Enter query mode and verify that this field is accessible.
(✓) Enter query mode and enter a valid value in this field.
   (✓) Only records matching the entered value should be displayed.
Block Title: Results of Sample Analysis
Block Table: RESULTS
Block Usage: Undefined

Block Help
---------------------------------------------------------------------
This table is used to store the header information for the results of one method performed on a sample. It is used to store information that applies to all of the constituents tested for by a method.

Block Test Plan

( ) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

( ) Purpose of the block.
( ) Options available in the block.
( ) The relationship of the block to the transaction or to the principal parent block of the transaction.
( ) Navigation to other blocks of the transaction.

( ) Where block synchronization is used, ensure that the block data is in sync with the parent block.

( ) Query a single record:

( ) A single record is retrieved.
( ) Pressing the F12 key clears the record and permits entering a second query.
( ) The second query successfully retrieves the desired data.

( ) Query multiple records using wild cards:

( ) Pressing F12 clears the block and makes the block ready for a query.
( ) A query composed of a trailing % wildcard retrieves the desired data.
( ) A query using a prefix % wildcard retrieves the correct data.
( ) A query using both prefix and suffix % wildcards retrieves the correct data.
( ) A query using the underscore (_) position wildcard retrieves the correct data.

( ) Verify that the data queries in the block are ordered logically.

( ) Store a series of records using the F6 [duplicate record] key to carry forward field values from the previously stored record.
Field Prompt: Extract Date
Field Usage: Non Updateable
Field Name: DATE_EXTRACTED

Field Help

Enter the date the sample was extracted.
This field:

- Is optional and may be left empty.
- Must use the following structure: MM/DD/YY where

  MM = the number of the Month.
  DD = the number of the day.
  YY = the two-digit number of the year, eg. ('92' = '1992')

Field Test Plan

( ) Verify that the field only allows valid dates.
( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Attempt to change data in the field. An error should result.
  ( ) Use the spacebar to attempt to change data.
  ( ) Use the clear field key (F8) to attempt to change data.

( ) Attempt to delete data in the field. An error should result.
  ( ) Use the spacebar to attempt to delete data.
  ( ) Use the clear field key (F8) to attempt to delete data.

( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
  ( ) Only records matching the entered value should be displayed.
Field Prompt: Date Analyzed
Field Usage: Non Updateable
Field Name: DATE_ANALYSIS

Field Help
Enter the date the analysis was performed on the sample.
This field:
- Is optional and may be left empty.
- Must use the following structure: MM/DD/YY where

  MM = the number of the month.
  DD = the number of the day.
  YY = the two digit number of the year, e.g. '92' = '1992'.

Field Test Plan

(✓) Verify that the field only allows valid dates.

(✓) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

(✓) Attempt to change data in the field. An error should result.
   (✓) Use the spacebar to attempt to change data.
   (✓) Use the clear field key (F8) to attempt to change data.

(✓) Attempt to delete data in the field. An error should result.
   (✓) Use the spacebar to attempt to delete data.
   (✓) Use the clear field key (F8) to attempt to delete data.

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.
   (✓) Only records matching the entered value should be displayed.
Field Prompt: Units  
Field Usage: Non Updateable  
Field Name: CONCENTRATION_UNITS  

Field Help  
------------------------------------------------------  
This field is the concentration units for the constituent data associated with this results record. List of values available.  
------------------------------------------------------  
This data field:  
- May contain any character combination  
- All input is converted to upper case.  

Field Test Plan  
------------------------------------------------------  

(✓) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.  

(✓) Enter data beyond the length of the field:  
   - If autoskip is in effect, cursor will skip to the next field.  
   - If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.  

(✓) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.  

(✓) Attempt to change data in the field. An error should result.  
   - Use the spacebar to attempt to change data.  
   - Use the clear field key (F8) to attempt to change data.  

(✓) Attempt to delete data in the field. An error should result.  
   - Use the spacebar to attempt to delete data.  
   - Use the clear field key (F8) to attempt to delete data.  

(✓) Enter query mode and verify that this field is accessible.  

(✓) Enter query mode and enter a valid value in this field.  
   - Only records matching the entered value should be displayed.  

(✓) Accept the default.  

(✓) Modify each default value with a valid alternative.  

(✓) Modify each default value with an invalid alternative.
Block Title: Constituents Found In Results
Block Table: CONSTITUENT_RESULTS
Block Usage: Undefined

Block Help

This table contains the analytical results for one constituent for a specific sample as determined by the analytical laboratory that performed the analysis.

Block Test Plan

( ) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

( ) Block help describes:

( ) Purpose of the block
( ) Options available in the block
( ) The relationship of the block to the transaction or to the principal parent block of the transaction
( ) Navigation to other blocks of the transaction

( ) Where block synchronization is used, ensure that the block data is in sync with the parent block.

( ) Query a single record:

( ) A single record is retrieved.
( ) Pressing the F12 key clears the record and permits entering a second query.
( ) The second query successfully retrieves the desired data.

( ) Query multiple records using wild cards:

( ) Pressing F12 clears the block and makes the block ready for a query.
( ) A query composed of a trailing % wildcard retrieves the desired data.
( ) A query using a prefix % wildcard retrieves the correct data.
( ) A query using both prefix and suffix % wildcards retrieves the correct data.
( ) A query using the underscore ( _ ) position wildcard retrieves the correct data.

( ) Verify that the data queries in the block are ordered logically.

( ) Store a series of records using the F6 [duplicate record] key to carry forward field values from the previously stored record.
(✓) Attempting to store the duplicated record without change should result in an error.
(✓) Change key fields and store the record. It should store successfully.
(✓) Attempt to delete a record. An error should occur.

Field Prompt: CAS Id
Field Usage: Queryable Only
Field Name: IDENT_CAS

Field Help
This data field:
- Is optional and may be left empty.
- May contain any character combination.
- All input is converted to upper case.

Field Test Plan
(✓) Enter query mode and verify that this field is accessible.
(✓) Enter query mode and enter a valid value in this field.
(✓) Only records matching the entered value should be displayed.

Field Prompt: Full Name
Field Usage: Queryable Only
Field Name: NAME_CON_LONG

Field Help
This data field:
- Is optional and may be left empty.
- May contain any character combination.
- All input is converted to upper case.

Field Test Plan
(✓) Enter query mode and verify that this field is accessible.
(✓) Enter query mode and enter a valid value in this field.
(✓) Only records matching the entered value should be displayed.

--- End of Document ---
Field Prompt: Conc Value  
Field Usage: Non Updateable  
Field Name: CONC_VALUE

Enter the concentration value for the constituent.

This field:
- Is optional and may be left empty.
- Must contain a numeric value - 0-9, ',', or '-'

Field Test Plan

( ) Attempt to store alphabetic characters in the field. An error should result.

( ) Begin the field entry with a space. An error should result.

( ) Attempt to enter a longer data value than allowed.

( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Attempt to change data in the field. An error should result.
   ( ) Use the spacebar to attempt to change data.
   ( ) Use the clear field key (F8) to attempt to change data.

( ) Attempt to delete data in the field. An error should result.
   ( ) Use the spacebar to attempt to delete data.
   ( ) Use the clear field key (F8) to attempt to delete data.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Attempt to store decimal data. Data to the limit of the decimal places provided by the field definition will be allowed.

   ( ) Help for the field should identify the number of decimal places allowed.
   ( ) Store a data value without decimal. The value should be zero to the right of the decimal place.
   ( ) Store a single digit decimal value.
   ( ) Store a decimal value to the maximum number of allowed decimal positions.
   ( ) Store a decimal value greater than the maximum number of allowed decimal positions. An error should occur.
Field Prompt: Qual  
Field Usage: Non Updateable  
Field Name: QUALIFIER

Field Help

This field contains the data validation qualifier codes.

This data field:
- May contain any character combination.
- All input is converted to upper case.
- Must contain a valid value. See LOV for list of valid values.
- Has a default value.

Field Test Plan

(✓) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

(✓) Enter data beyond the length of the field:
   {✓} If autoskip is in effect, cursor will skip to the next field.
   {✓} If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

(✓) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

(✓) Attempt to change data in the field. An error should result.
   {✓} Use the spacebar to attempt to change data.
   {✓} Use the clear field key (F8) to attempt to change data.

(✓) Attempt to delete data in the field. An error should result.
   {✓} Use the spacebar to attempt to delete data.
   {✓} Use the clear field key (F8) to attempt to delete data.

Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.
   {✓} Only records matching the entered value should be displayed.

(✓) Accept the default.

(✓) Modify each default value with a valid alternative.

(✓) Modify each default value with an invalid alternative.

(✓) Test LOV:
   {✓} Select the first entry in the LOV.
   {✓} Select the last entry in the LOV.
Use the FIND option and select an entry.
Programmer's Bug Report

Application: LEMIS  Liquid Effluent Monitoring Information System

Transaction: LE4310U1 Verify Constituent Results

<table>
<thead>
<tr>
<th>Comment ID</th>
<th>1054</th>
<th>Priority: LOW</th>
<th>Date: 03-MAY-93</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Status</th>
<th>HANDLED</th>
<th>Date: 03-MAY-93</th>
<th>Class:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>PROBLEM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assigned To</td>
<td>KEN ATKINS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entered By</td>
<td>LORRAINE CAMPBELL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System ID</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Last Error</td>
<td>-0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Last Msg</td>
<td>FRM-40350</td>
<td>Query caused no records to be retrieved.</td>
<td></td>
</tr>
<tr>
<td>Table</td>
<td>RESULTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block</td>
<td>RESULT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field</td>
<td>RESULT.DSP_IDENT_METHOD</td>
<td>D</td>
<td></td>
</tr>
</tbody>
</table>

Oracle ROWID:

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>method has no field help!</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CORRECTIVE ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/3/93 - Set field to display method help.</td>
</tr>
</tbody>
</table>

376
Application: LEMIS  Liquid Effluent Monitoring Information System

Transaction: LE4310U1 Verify Constituent Results

Comment ID : 1055  Priority: LOW  Date: 03-MAY-93

Status : HANDLED  Date: 03-MAY-93  Class:
Type : PROBLEM
Assigned To : KEN ATKINS
Entered By : LORRAINE CAMPBELL
System ID : 92000017688  Oracle ROWID: 00000383.000A.0009
Last Error : -0
Last Msg : FRM-40350 Query caused no records to be retrieved.
Table : RESULTS
Block : RESULT
Field : RESULT.DSP_IDENT_METHO

DESCRIPTION

block help is kind of confusing. States one method when several methods can be entered.

CORRECTIVE ACTION

5/3/93 - Modified help text for RESULTS.
Programmer's Bug Report

Application: LEMIS

Liquid Effluent Monitoring Information System

Transaction: LE4310U1 Verify Constituent Results

-------------------------------
Comment ID : 1056  Priority: LOW  Date: 03-MAY-93
-------------------------------
Status : HANDLED  Date: 03-MAY-93  Class:
Type : PROBLEM
Assigned To: KEN ATKINS
Entered By : LORRAINE CAMPBELL
System ID : Oracle ROWID:
Last Error : 0
Table : FRM-40350  Class:
Block : CONSTITUENT_RESULTS
Field : CONRES.DSP_IDENT_CAS

DESCRIPTION

There is no field help for cas id nor block help

CORRECTIVE ACTION

5/3/93 - Pointed field help to correct place.
03-MAY-93

Programmer's Bug Report

Application: LEMIS Liquid Effluent Monitoring Information System

Transaction: LE4310U1 Verify Constituent Results

Comment ID: 1057 Priority: LOW Date: 03-MAY-93

Status: HANDLED Date: 03-MAY-93 Class: PROBLEM

Assigned To: KEN ATKINS
Entered By: LORRAINE CAMPBELL
System ID: 92000017699 Oracle ROWID: 00000736.000D.0009
Last Error: -0
Last Msg: FRM-40400 Transaction complete -- 1 records posted

Table: CONSTITUENT_RESULTS
Block: CONRES
Field: CONRES.DSP_IDENT_CAS

DESCRIPTION

booklet states that cas id and full name are query only. These fields do not query

CORRECTIVE ACTION

5/3/93 - This is OK. The book is incorrect.
03-MAY-93

Programmer's Bug Report

Application: LEMIS  Liquid Effluent Monitoring Information System

Transaction: LE4310U1 Verify Constituent Results

03-08-93

 Comment ID: 1058  Priority: LOW  Class:

Type: PROGRAM

Assigned To: KEN ATKINS

Entered By: LORRAINE CAMPBELL

System ID: Oracle ROWID:

Last Error: 0

Last Msg: FRM-50016  Legal characters are 0-9 - + E .

Table: CONSTITUENT_RESULTS

Block: CONRES

Field: CONRES.CONC_VALUE

CORRECTIVE ACTION

5/3/93 - Rewrote hint text.
<table>
<thead>
<tr>
<th>CAS NO.</th>
<th>COMPOUND</th>
<th>CONCENTRATION UNITS: (ug/L or ug/Kg)</th>
<th>Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>74-87-3</td>
<td>Chloromethane</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>74-83-9</td>
<td>Bromomethane</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>75-01-4</td>
<td>Vinyl Chloride</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>75-00-3</td>
<td>Chloroethane</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>75-09-2</td>
<td>Methylene Chloride</td>
<td>27</td>
<td>U</td>
</tr>
<tr>
<td>67-64-1</td>
<td>Acetone</td>
<td>21</td>
<td>U</td>
</tr>
<tr>
<td>75-15-0</td>
<td>Carbon Disulfide</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>75-35-4</td>
<td>1,1-Dichloroethene</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>75-34-3</td>
<td>1,1-Dichloroethene (total)</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>540-59-0</td>
<td>Chloroform</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>107-06-2</td>
<td>1,2-Dichloroethane</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>78-93-3</td>
<td>2-Butanone</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>71-55-6</td>
<td>1,1,1-Trichloroethane</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>56-23-5</td>
<td>Carbon Tetrachloride</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>75-27-4</td>
<td>Bromodichloromethane</td>
<td>2/</td>
<td>U</td>
</tr>
<tr>
<td>78-87-5</td>
<td>1,2-Dichloropropane</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>10061-01-5</td>
<td>cis-1,3-Dichloropropene</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>79-01-6</td>
<td>Trichloroethene</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>124-48-1</td>
<td>Dibromochloromethane</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>79-00-5</td>
<td>1,1,2-Trichloroethene</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>71-43-2</td>
<td>Benzene</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>10061-02-6</td>
<td>trans-1,3-Dichloropropene</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>75-25-2</td>
<td>Bromoform</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>108-10-1</td>
<td>4-Hexyl-2-pentanone</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>591-78-6</td>
<td>2-Hexanone</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>127-18-4</td>
<td>Tetrachloroethene</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>79-34-5</td>
<td>1,1,2,2-Tetrachloroethene</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>108-88-3</td>
<td>Toluene</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>108-90-7</td>
<td>Chlorobenzene</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>100-41-4</td>
<td>Ethylbenzene</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>100-42-5</td>
<td>Styrene</td>
<td>10</td>
<td>U</td>
</tr>
<tr>
<td>1330-20-7</td>
<td>Xylene (total)</td>
<td>10</td>
<td>U</td>
</tr>
</tbody>
</table>

CONSTITUENT RESULTS

FORM 1 VOA 3/90

381
LEMIS Module Test Checklist Report

Name: ENTER VERIFICATION DATA
Short Name: LE4311U1
Purpose: To verify result information.
Initial Test Date: 11/10/92
Verification Date: 11/12/93

Module Description
------------------
This transaction is used to enter data to verify the data loaded from datafiles. A certain percentage of the loaded data should be entered by hand to verify the accuracy of the loaded data.

Module Help
------------
This transaction is used to enter data to verify the data loaded from datafiles. A certain percentage of the loaded data should be entered by hand to verify the accuracy of the loaded data.
- The first block is used to query the desired SAF.
- The second block is used to enter the verification data.

To enter validation data:

1) If "Enter a query; press Shift-F12 to execute, Esc to cancel" does not appear on the bottom of the screen, Press <F12> to enter query mode.

2) Enter the SAF or SAP number in the appropriate field and press <Shift-F12>. The Recs needed, Recs Entered, and Version fields will be filled. These fields have the following purposes:
   - Recs Needed - The number of validation records that need to be entered for this SAF.
Module Help

Recs Entered - The number of validation records entered so far.

Version - The version of validation. Only used when the validation fails, and needs to be re-done.

The Version may be incremented by pressing <Shift-F5>.

3) Press <Page Down> to move to the 'Results Verification Data' block

4) Enter the desired HEIS number and press <Enter>. The HEIS number must be valid for this SAF. List of values is available.

5) Only one of the CAS number or Constituent name need to be entered
   a) To enter the CAS number, type the CAS number (with or without dashes) and press <Enter>. If the number is valid, the cursor will move to the RESULT field. List of values is available.
   b) To enter the CONSTITUENT name, press <Enter> to skip the CAS field, then enter the desired constituent name. If the Constituent name is valid, the CAS ID will be filled and the cursor will move to the RESULT field. List of values is available. Wildcards may be used when entering the constituent name. If only one constituent matches the wildcard, the rest of the name will be filled automatically. For example: If "ALUM%" is entered, the system will find "ALUMINUM" and enter that as the constituent.

6) Enter the result value and press <Enter>.

7) Enter the Units and press <Enter>. List of values is available.

8) Enter the qualifier and press <Enter>. List of values is available.

9) Repeat steps 4–8 until enough verification records are entered. The value in the "Recs Entered" field will increment with each entry.

UNIT TEST CHECKLIST

<table>
<thead>
<tr>
<th>Function Key</th>
<th>Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show Version : Shift-F10</td>
<td></td>
</tr>
<tr>
<td>Comment/Bug : Shift-F3</td>
<td></td>
</tr>
<tr>
<td>Fast Access : F5</td>
<td></td>
</tr>
<tr>
<td>Back : F4 or Esc</td>
<td></td>
</tr>
<tr>
<td>Main Menu : Shift-F4</td>
<td></td>
</tr>
<tr>
<td>Key Template : Ctrl-F1</td>
<td></td>
</tr>
<tr>
<td>Context Prnt : F11</td>
<td></td>
</tr>
<tr>
<td>Query Print : Ctrl-F11</td>
<td></td>
</tr>
<tr>
<td>Oracle Print : Shift-F11</td>
<td></td>
</tr>
<tr>
<td>Menu Description : F11</td>
<td></td>
</tr>
</tbody>
</table>

Block Title: Sample Authorization
Block Table: SAMPLE_AUTHORIZATION
Block Title: Sample Authorization
Block Table: SAMPLE AUTHORIZATION

Help : F1
Online Doc : F2
Related Data : F3
Spec Func 1 : Shift-F5

Home/End : Home/End
Scroll Up/Dn : Shift-Up/Dn
Prv/Nxt Rec : Up/Down

Clear Field : F8
Clear Form : Shift-F8
Insert Rec : Insert
Delete Rec : Delete

Enter Query : F12
Correct Query Fields?
Execute Qry : Shift-F12

Block Title: Results Verification Data
Block Table: RESULTS_VERIFICATION

Help : F1
Online Doc : F2
Related Data : F3
Spec Func 1 : Shift-F5

Home/End : Home/End
Scroll Up/Dn : Shift-Up/Dn
Prv/Nxt Rec : Up/Down

Clear Field : F8
Clear Form : Shift-F8
Insert Rec : Insert
Delete Rec : Delete

Enter Query : F12
Correct Query Fields?
Execute Qry : Shift-F12

Mandatory checks OK?
List of Values OK?
Duplicate Rec: F6
Optional fields marked?

TEST PLAN
3

384
Testing of the transaction is performed at four levels:

1. Developer testing.
2. Secondary testing.
3. End user testing.
4. Production release & verification.

As each applicable section of this test plan is completed, the designated individual responsible for the section will sign the plan in the appropriate places. Each check off item will be completed. The status of the transaction will be updated in the data dictionary as the transaction progresses through the development and test steps.

Developer Testing

As each individual transaction is generated, the developer performs tests against the transaction to insure that it meets specifications and works properly. Upon successful completion of this testing, the transaction is made available for secondary testing.

Test status conditions are:

1. Transaction under development, untested.
2. Development complete, initial unit testing in progress.
3. Initial unit testing complete.
4. Transaction added to menu and security.
5. Transaction moved to development directory (addmod).
6. Help added.
7. Unit Test checklist completed.
8. Specific test plan added (if needed).
9. Any bugs found in Unit test fixed.
10. Updated test bookat printed.

Secondary Testing

Secondary testing is performed by a person external to the development team. Tests are performed using a standardized test checklist. Initial testing is performed to ensure that the transaction meets the functional requirements of the transaction and satisfies the test plan narrative that follows.

4. Secondary testing in progress.
5. Secondary testing complete, problems found. Resolution in progress.
6. Unable to resolve problem at this time.
7. Problem resolution complete.
8. Secondary testing complete, no problems found.

When problems are found:

James H. Mathis, Date Complete 10-19-93

James H. Mathis, Date Complete 11-19-93
1. The tester passes the checklist to the project manager for review and action.
2. The project manager assigns the checklist to the developer of the transaction for correction of the problems.
3. The developer corrects the described problems, records the corrective actions taken and the number of hours of corrective effort used, tests the transaction for correct operation, and returns the checklist to the project manager.
4. The project manager returns the checklist to the tester for retesting.

The above sequence of events repeats until the tester signs off the transaction as passing the test requirements.

End User Testing

The transaction is tested by end users for a predetermined time period. This testing is done in the development environment. If no problems are encountered, or all problems are resolved at the end of this time period, the module is ready for Project Manager review.

( ) 9 - End User testing in progress.
( ) 10 - Problem found, resolution in progress.
( ) 11 - Problem resolution complete.
  Developer __________ Date Complete __________
( ) 12 - Resolution verified.
  Tester ______________ Date Complete __________

Production Status

( ) 13 - Ready for Project Manager/System Architect review.
  (√) The Project Manager or System Architect reviews all test results and determines that the transaction has completed testing.
  Architect/Manager __________ Date Complete 11/10/93

( ) 14 - The transaction is ready to be placed into production.
  (√) Software files moved to production directory.
  (√) Transaction added to production menu.
  (√) Transaction access given to production roles.
  (√) Validation test performed in production.
  (√) Production documentation up to date.

( ) 15 - The transaction has been put into production
  By __________ Date Done 11/26/93

Module Test Plan

(✓) Display transaction help. Verify that the narrative adequately...
describes the purpose and functions of the transaction in end-user terms.

Transaction help describes:
(✓) Purpose of the transaction
(✓) Functions performed by the transaction
(✓) Where multiple block, what happens in each block.

Block Title: Sample Authorization
Block Table: SAMPLE AUTHORIZATION
Block Usage: Query Only

Block Help
This block contains the header information for the SAF (Sample Authorization Form). This includes the SAF ID, Date the sampling activity has been requested, and a few descriptive fields about this sampling activity. The detailed information for this SAF will be entered in subsequent blocks.

Block Test Plan
Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

(✓) Block help describes:
(✓) Purpose of the block
(✓) Options available in the block
(✓) The relationship of the block to the transaction or to the principal parent block of the transaction
(✓) Navigation to other blocks of the transaction

Where block synchronization is used, ensure that the block data is in sync with the parent block.

Query functionality:
(✓) Query a single record.
(✓) Pressing the F12 key clears the record and permits entering a second query.
(✓) Query multiple records using wildcards: "$" & " _"

Verify that the data queries in the block are ordered logically.
(✓) Query a SAF and enter verification data.
(✓) The first time data is entered, the Version should be set to 1
(✓) The Recs Entered should be zero.

After data has been entered, Query the same SAF as before and enter more data.
(✓) The Version should be set to the same version as before.
The Recs Entered should be set to the number of records entered previously.

The Version should be set one higher.

The Recs Entered should be set to zero.

The bottom block should clear.

Field Prompt: SAP
Field Usage: Queryable Only
Field Name: IDENT_SAP

Field Help
This field uniquely identifies the responsible SAP for this sample schedule.

Field Test Plan

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.

Only records matching the entered value should be displayed.

Field Prompt: TITLE_SAP
Field Usage: Queryable Only
Field Name: TITLE_SAP

Field Help
This is a 1-40 character descriptive title for the SAP.

Field Test Plan

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.

Only records matching the entered value should be displayed.
Field Prompt: SAF
Field Usage: Non Updateable
Field Name: IDENT_SAF

Field Help
The SAF ID should uniquely identify the SAF. If ’.’ is entered then
the SAF ID will be defaulted to the SAP ID with a sequence number.

This data field:
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.
- May contain any character combination.

Field Test Plan
(✓) Enter query mode and verify that this field is accessible.
(✓) Enter query mode and enter a valid value in this field.
(✓) Only records matching the entered value should be displayed.

Field Prompt: Version
Field Usage: Queryable Only
Field Name: CTRL$NXT_VERSION_LOAD

Field Help

Field Test Plan
(✓) Enter query mode and verify that this field is accessible.
(✓) Enter query mode and enter a valid value in this field.
(✓) Only records matching the entered value should be displayed.
Block Title: Results Verification Data
Block Table: RESULTS_VERIFICATION
Block Usage: Undefined

Block Help

This table holds the verification data. This data is compared to the data in the results tables to determine if the data passes the verification test.

Block Test Plan

(✓) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

(✓) Block help describes:

- Purpose of the block
- Options available in the block
- The relationship of the block to the transaction or to the principal parent block of the transaction
- Navigation to other blocks of the transaction

(✓) Where block synchronization is used, ensure that the block data is in sync with the parent block.

(✓) Query functionality:

- Query a single record.
- Pressing the F12 key clears the record and permits entering a second query.
- Query multiple records using wildcards: "?" & "_"

(✓) Verify that the data queries in the block are ordered logically.

(✓) Store a series of records using the F6 [duplicate record] key to carry forward field values from the previously stored record.

- Attempting to store the duplicated record without change should result in an error.
- Change key fields and store the record. It should store successfully.

(✓) Enter a Constituent by selecting a CAS ID.

- The constituent name should be filled.
- The cursor should move to the Result field.

(✓) Enter a Constituent by selecting a Constituent Name.

- The CAS ID should be filled.

(✓) Use LOV to select a constituent.

- Only constituents that are requested for this method should be displayed.
- The CAS ID should be filled.
Use LOV to select a CAS ID.

Only constituents that are requested for this method should be displayed.

The constituent field should be filled.

Enter a constituent that is tested by two methods for the SAF

A method LOV should be displayed.

Only the methods that test for this constituent should be

Attempt to move past the constituent field without entering either constituent or CAS ID. An error should occur.

Field Prompt: **Sample**

Field Usage: Queryable Only

Field Name: **IDENT_SAMPLE**

Field Help

This field uniquely identifies the sample to the database. An error will occur if you attempt to enter a identification value already present in the database. These records are automatically created with a temporary Sample ID. When the field data is entered, the HEIS number will be entered as the Sample ID.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

Enter query mode and verify that this field is accessible.

Enter query mode and enter a valid value in this field.

Only records matching the entered value should be displayed.
Field Prompt: CAS Id
Field Usage: Queryable Only
Field Name: IDENT_CAS

Field Help
------------------------------------------------------------------------
This data field:
- May contain any character combination.
- All input is converted to upper case.

Field Test Plan
------------------------------------------------------------------------

( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.

Field Prompt: Constituent
Field Usage: Queryable Only
Field Name: NAME_CON_LONG

Field Help
------------------------------------------------------------------------
This data field:
- Is optional and may be left empty.
- May contain any character combination.
- All input is converted to upper case.

Field Test Plan
------------------------------------------------------------------------

( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.
Field Prompt: Result
Field Usage: Non Updateable
Field Name: CONC_VALUE

Field Help

Enter the concentration value for this constituent. This field only allows three decimal places.

This field:
- Is Mandatory and must be entered.
- Must contain a numeric value (0-9, ., or -)

Field Test Plan

(✓) Attempt to store alphabetic characters in the field. An error should result.

(✗) Attempt to enter a longer data value than allowed.

(✓) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

(✓) Attempt to change data in the field. An error should result.
   (✓) Use the spacebar to attempt to change data.
   (✓) Use the clear field key (F8) to attempt to change data.

(✓) Attempt to delete data in the field. An error should result.
   (✓) Use the spacebar to attempt to delete data.
   (✓) Use the clear field key (F8) to attempt to delete data.

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.
   (✓) Only records matching the entered value should be displayed.

(✓) Attempt to store decimal data. Data to the limit of the decimal places provided by the field definition will be allowed.

   (✓) Help for the field should identify the number of decimal places allowed.
   (✓) Store a data value without decimal. The value should be zero to the right of the decimal place.
   (✓) Store a single digit decimal value.
   (✓) Store a decimal value to the maximum number of allowed decimal positions.
   (✓) Store a decimal value greater than the maximum number of allowed decimal positions. An error should occur.

(✓) Attempt to delete an existing data field value. An error should.
result when <F10> or <Enter> are pressed.
(✓) Use the space bar to attempt to delete the field data.
(✓) Use clear field (F8) to attempt to delete the field data.
(✓) Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.
Field Prompt: Units
Field Usage: Non Updateable
Field Name: CONC_UNIT_MEASURE

Field Help

Enter the unit of measure to be used for this concentration value (result).

This field:
- Is mandatory and must be entered.
- Must contain a valid unit of measure. See List of Values for a list of valid units.

Field Test Plan

( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

( ) Display column help. Verify that the narrative adequately describes the column’s purpose and functions in end-user terms.

( ) Attempt to change data in the field. An error should result.
   ( ) Use the spacebar to attempt to change data.
   ( ) Use the clear field key (F8) to attempt to change data.

( ) Attempt to delete data in the field. An error should result.
   ( ) Use the spacebar to attempt to delete data.
   ( ) Use the clear field key (F8) to attempt to delete data.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Attempt to delete an existing data field value. An error should result when <F10> or <Enter> are pressed.
   ( ) Use the space bar to attempt to delete the field data.
   ( ) Use clear field (F8) to attempt to delete the field data.

( ) Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.
( ) Test LOV:
   (✓) Select the first entry in the LOV.
   (✓) Select the last entry in the LOV.
   (✓) Use the FIND option and select an entry.

Field Prompt: Qual
Field Usage: Non Updateable
Field Name: QUALIFIER

Field Help

Enter the data validation qualifier code for this result value.

This data field:
- May contain any valid character combination.
- All input is converted to upper case.
- Must contain a valid value. See LOV for list of valid values.

Field Test Plan

(✓) Verify that the field accepts character or numeric data within
the limits imposed by validation criteria.

(✓) Enter data beyond the length of the field:
   ✓ If autoskip is in effect, cursor will skip to the next field.
   ✓ If no autoskip, cursor will remain at the end of the field and
     overlay characters, leaving the last character keyed in the
     last position of the field.

(✓) Attempt to change data in the field. An error should result.
   ✓ Use the spacebar to attempt to change data.
   ✓ Use the clear field key (F8) to attempt to change data.

(✓) Attempt to delete data in the field. An error should result.
   ✓ Use the spacebar to attempt to delete data.
   ✓ Use the clear field key (F8) to attempt to delete data.

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.
   ✓ Only records matching the entered value should be displayed.

(✓) Test LOV:
   (✓) Select the first entry in the LOV.
   (✓) Select the last entry in the LOV.
   (✓) Use the FIND option and select an entry.
Field Prompt:
Field Usage: Queryable Only
Field Name: IDENT_SAMPANAL

Field Help
---------------------------------------------------------------
This is the analysis request line number. Every analysis record with the same value in this field will be done using the same set of bottles. This is done to allow several analyses to be done from the same set of bottles. When more than one record uses the same request number, the bottle qty, type, size, and preservative needs to be the same for every record. If a request number is entered that has been entered previously, a warning message to this effect will be displayed. If nothing is entered into this field, the system will default it to the next number in sequence.

This data field:
- Must contain a valid value. A blank is not allowed.
- Must contain a numeric value (1-999)

Field Test Plan
---------------------------------------------------------------
( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.
Programmer's Comment Report

Transaction: LE4311U1 Enter Verification Data

Comment ID: 38  Priority: MED  Date: 25-OCT-93

Status: ASSIGNED  Date: 01-NOV-93  Class:
Type: PROBLEM
Disposition: Not a Problem.
Assigned To: JAMES DYCK
Entered By: TEST USER
System ID: 92000031050  Oracle ROWID: 00000030.0000.0019
Last Error: -0
Last Msg: FRM-40350  Query caused no records to be retrieved.
Table: RESULTS_VERIFICATION
Block: RESVER
Field: RESVER.DSP_IDENT_SAMPL

DESCRIPTION

Result verification block is not in sync with parent block

NOTES

This is not a problem because the form is in sync when the Results Verification Data block is queried manually by the user. The form does not auto trigger the Results Verification Data block because its primary purpose is to input data not retrieve. The help text has been modified to indicate this.
LEMIS Module Test Checklist Report

Name: ENTER VERIFICATION DATA
Short Name: LE4311U1
Purpose: To verify result information.

Initial Test Date: __________
Verification Date: __________

Module Description
---------------------
This transaction is used to enter data to verify the data loaded from datafiles. A certain percentage of the loaded data should be entered by hand to verify the accuracy of the loaded data.

Module Help
-----------
This transaction is used to enter data that is used to verify the data loaded from datafiles. A certain percentage of the loaded data should be entered by hand to verify the accuracy of the loaded data.

On the Enter Verification Data form:
- The first block is used to query the desired SAF and set the version number.
- The second block is used to enter the verification data.

To query the desired SAF and set the version number:

1) If "Enter a query; press Shift-F12 to execute, Esc to cancel" does not appear on the bottom of the screen, Press <F12> to enter query mode.
2) Enter the SAF number in the appropriate field and press <Shift-F12> to execute the query. The Recs needed, Recs Entered, and Version fields will be filled. These fields have the following purposes:
Module Help

Recs Needed - The number of verification records that need to be entered for the current SAF.

Recs Entered - The number of verification records entered so far for the current SAF and version.

Version - The version of verification input. Only used when the verification fails, and a complete new set of records needs to be entered.

The Version may be incremented by pressing <Shift-F5>. To decrement the version number, re-query the SAF and increment the version number to the desired version.

Note that the results block is not auto-queried.

To enter Verification data:

3) Press <Page Down> to move to the 'Results Verification Data' block.
4) Enter the desired HEIS number and press <Enter>. The HEIS number must be valid for this SAF. List of values is available.
5) Enter the CAS number or Constituent name. List of Values is available for both the CAS and the Constituent name.
   a) To enter the CAS number, type the CAS number (with or without dashes) and press <Enter>. If the number entered is valid, the cursor will move to the RESULT field automatically filling the Constituent name. If the number is invalid, an error message and a reminder of List of Values will appear.
   b) To enter the CONSTITUENT name, press <Enter> to skip the CAS field; then enter the desired constituent name. If the Constituent name is valid, the CAS ID will be filled and the cursor will move to the RESULT field. If the name is invalid, and error message and a reminder of List of Values will appear. Wildcards may be used when entering the constituent name. If only one constituent matches the wildcard, the rest of the name will be filled automatically. For example: If "ALUM%" is entered, the system will find "ALUMINUM" and enter that as the constituent name.
6) Enter the result value and press <Enter>.
7) Enter the Units and press <Enter>. List of values is available.
8) Enter the qualifier if applicable and press <Enter>. List of Values is available.
9) Repeat steps 4 through 8 until enough verification records for the current SAF and version are entered. The value in the "Recs Entered" field will increment with each entry.

To enter a set of records for the next SAF, press <Page Up> and query the desired SAF.
Programmer's Comment Report

Transaction: LE4311U1 Enter Verification Data

Status: HANDLED  Date: 01-NOV-93  Class: PROBLEM
Disposition: Not a Problem.
Assigned To: JAMES DYCK
Entered By: TEST USER
System ID: 92000031053  Oracle ROWID: 00000030.0002.0019
Last Error: -0
Last Msg: FRM-41004  Function key not allowed in this mode.
Table: RESULTS_VERIFICATION
Block: RESVER
Field: RESVER.DSP_NAME_CON_LO

Description
Constituent is queryable only but will not query

Notes
11-01-93 JAD - This is not a problem at this time because the Constituent field is not intended to be used in a query. Even though it states in the test plan that this field is queryable, it is not.
Transaction: LE4311U1 Enter Verification Data

<table>
<thead>
<tr>
<th>Status</th>
<th>HANDLED</th>
<th>Date: 01-NOV-93</th>
<th>Class: PROBLEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tm=</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disposition</td>
<td>Not a Problem.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assigned To</td>
<td>JAMES DYCK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entered By</td>
<td>TEST USER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System ID</td>
<td>92000031053</td>
<td>Oracle ROWID:</td>
<td>00000030.0002.0019</td>
</tr>
<tr>
<td>Last Error</td>
<td>-0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Last Msg</td>
<td>FRM-41000</td>
<td>You pressed an undefined function key.</td>
<td></td>
</tr>
<tr>
<td>Table</td>
<td>RESULTS_VERIFICATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block</td>
<td>RESVER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field</td>
<td>RESVER.DSP_IDENT_SAMPL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DESCRIPTION

field CAS ID is queryable only but will not query.

NOTES

11-01-93 JAD - This is not a problem at this time because the CAS ID field is not meant to be used in a query. The form is used mainly for input. Even though it states in the test plan that this field is queryable, it is not.
LEMIS Module Test Checklist Report

Name: UPDATE DATA VALUE CODE
Short Name: LE5110U1
Purpose: To update the data value code

Initial Test Date: 4/19/94
Verification Date: 1-28-94

Module Description
-------------------
This module is used update the Data Value Code.

Module Help
------------
This transaction is used to enter/change a Data Value Code for a particular SAF.

The form consists of one page.

To enter/change a Data Value Code:

1) If the text "Enter a query; press Shift-12 to execute," does not appear at the bottom of the screen press <F12>.
2) Enter the SAF or SAP number and press <shift-F12>. The Sample schedule information for the selected SAF or SAP will be displayed.
3) Use the <Enter> or <Tab> key to move the cursor to the 'Data Value Code' field.
4) Enter the desired Data Value Code. Use <F9> to see a list of Data Value Codes and their descriptions.
UNIT TEST CHECKLIST

Module Function Key

- Show Version: Shift-F10
- Comment/Bug: Shift-F3
- Fast Access: F5
- Back: F4 or Esc
- Main Menu: Shift-F4
- Key Template: Ctrl-F1
- Context Print: F11
- Query Print: Ctrl-F11
- Oracle Print: Shift-F11

Block Title: Sample Authorization
Block Table: SAMPLE_AUTHORIZATION

<table>
<thead>
<tr>
<th>Key Help</th>
<th>F1</th>
<th>Key Help</th>
<th>Shift-F1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Doc</td>
<td>F2</td>
<td>Dis Journal</td>
<td>Shift-F2</td>
</tr>
<tr>
<td>Related Data</td>
<td>F3</td>
<td>Edit Text</td>
<td>F7</td>
</tr>
<tr>
<td>Spec Func 1</td>
<td>Shift-F5</td>
<td>Spec Func 2</td>
<td>Ctrl-F5</td>
</tr>
<tr>
<td>Prv/Nxt Block</td>
<td>Home/End</td>
<td>Prv/Nxt Field</td>
<td>Tab/Sh-Tb</td>
</tr>
<tr>
<td>Prv/Nxt Rec</td>
<td>Up/Down</td>
<td>Commit Form</td>
<td>F10</td>
</tr>
<tr>
<td>Clear Field</td>
<td>F8</td>
<td>Clear Record</td>
<td>Shift-F8</td>
</tr>
<tr>
<td>Clear Form</td>
<td>Shift-F8</td>
<td>Exit System</td>
<td>Ctrl-F4</td>
</tr>
<tr>
<td>Insert</td>
<td>Insert</td>
<td>Add record at end</td>
<td></td>
</tr>
<tr>
<td>Delete</td>
<td>Delete</td>
<td>Duplicate Rec</td>
<td>F6</td>
</tr>
<tr>
<td>Enter Query</td>
<td>F12</td>
<td>Count Query</td>
<td>Ctrl-F12</td>
</tr>
<tr>
<td>Correct Query Fields?</td>
<td>(✓) UpperCase and LOVs?</td>
<td>(✓) Correct Query Order?</td>
<td></td>
</tr>
</tbody>
</table>

TEST PLAN

Testing of the transaction is performed at four levels:

1. Developer testing.
2. Secondary testing.
3. End user testing.
4. Production release & verification.

As each applicable section of this test plan is completed, the designated individual responsible for the section will sign the plan in the appropriate places. Each check off item will be completed. The status of the transaction will be updated in the data dictionary as the transaction progresses through the development and test steps.
Developer Testing

As each individual transaction is generated, the developer performs tests against the transaction to insure that it meets specifications and works properly. Upon successful completion of this testing, the transaction is made available for secondary testing.

Test status conditions are:

1. Transaction under development, untested.
2. Transaction added to menu and security.
3. Transaction moved to development directory (addmod).
4. Development complete, initial unit testing in progress.
5. Help added
6. Unit Test checklist completed.
7. Specific test plan added (if needed).
8. Any bugs found in unit test fixed.
9. Updated test booked printed.

Initial unit testing complete.

Tester __________________________ Date Complete 1/13/94

Secondary Testing

Secondary testing is performed by a person external to the development team. Tests are performed using a standardized test checklist. Initial testing is performed to ensure that the transaction meets the functional requirements of the transaction and satisfies the test plan narrative that follows.

1. Secondary testing in progress.
2. Secondary testing complete, problems found. Resolution in progress.
3. Unable to resolve problem at this time.
4. Problem resolution complete.
5. Secondary testing complete, no problems found.

When problems are found:

1. The tester passes the checklist to the project manager for review and action.
2. The project manager assigns the checklist to the developer of the transaction for correction of the problems.
3. The developer corrects the described problems, records the corrective actions taken and the number of hours of corrective effort used, tests the transaction for correct operation, and returns the checklist to the project manager.
4. The project manager returns the checklist to the tester for retesting.

The above sequence of events repeats until the tester signs off.
the transaction as passing the test requirements.

End User Testing

The transaction is tested by end users for a predetermined time period. This testing is done in the development environment. If no problems are encountered, or all problems are resolved at the end of this time period, the module is ready for Project Manager review.

( ) 9 - End User testing in progress.
( ) 10 - Problem found, resolution in progress.
( ) 11 - Problem resolution complete.

Developer ______________ Date Complete ______

Tester ______________ Date Complete ______

Production Status

( ) 13 - Ready for Project Manager/System Architect review.
( ) The Project Manager or System Architect reviews all test results and determines that the transaction has completed testing.
Architect/Manager ______________ Date Complete ______________

( ) 14 - The transaction is ready to be placed into production.
( ) Software files moved to production directory.
( ) Transaction added to production menu.
( ) Transaction access given to production roles.
( ) Validation test performed in production.
( ) Production documentation up to date.

( ) 15 - The transaction has been put into production

By ____________________________ Date Done ______________

Module Test Plan

✔ Display transaction help. Verify that the narrative adequately describes the purpose and functions of the transaction in end-user terms.

✔ Transaction help describes:
  ✔ Purpose of the transaction
  ✔ Functions performed by the transaction
  ✔ Where multiple block, what happens in each block.
Block Title: Sample Authorization
Block Table: SAMPLE_AUTHORIZATION
Block Usage: Update Only

Block Help

This block contains the header information for the SAF (Sample Authorization Form). This includes the SAF ID, Date the sampling activity has been requested, and a few descriptive fields about this sampling activity. The detailed information for this SAF will be entered in subsequent blocks.

Block Test Plan

(✓) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:
   (✓) Block help describes:
   (✓) Purpose of the block
   (✓) Options available in the block
   (✓) The relationship of the block to the transaction or to the principal parent block of the transaction
   (✓) Navigation to other blocks of the transaction

(✓) Where block synchronization is used, ensure that the block data is in sync with the parent block.

(✓) Query functionality:
   (✓) Query a single record.
   (✓) Pressing the F12 key clears the record and permits entering a second query.
   (✓) Query multiple records using wildcards: "%! & "

(✓) Verify that the data queries in the block are ordered logically.

(✓) Update a record:
   (✓) The change count should increment.
   (✓) The date updated should become the current date.
   (✓) An error should occur if the operator owner identifier does not match the data owner identifier.

Field Prompt: SAP
Field Usage: Queryable Only
Field Name: IDENT_SAP
Field Help

This field uniquely identifies the responsible SAP for this sample schedule.

Field Test Plan

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.

(✓) Only records matching the entered value should be displayed.

Field Prompt: Title
Field Usage: Queryable Only
Field Name: TITLE_SAP

Field Help

This is a 1-40 character descriptive title for the SAP.

Field Test Plan

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.

(✓) Only records matching the entered value should be displayed.

Field Prompt: SAF
Field Usage: Non Updateable
Field Name: IDENT_SAF

Field Help

The SAF ID should uniquely identify the SAP. If '.' is entered then the SAF ID will be defaulted to the SAP ID with a sequence number.

This data field:
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.
- May contain any character combination.

Field Test Plan

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.

(✓) Only records matching the entered value should be displayed.
Field Prompt: Data Value Code
Field Usage: Updateable
Field Name: LEVEL_DATA_VALID

Field Help

This field contains the current data validation level for the data item. The default value is "0" (zero). This identifies the data as raw and unvalidated. As the data is reviewed and validated, the validation level is changed to reflect the current state of the data. Use LOV to display the list of current valid validation levels.

This data field:
- Provides a default value. To accept the default value, press the ENTER key or TAB key.
- Must contain a valid value. A blank is not allowed.
- Must contain a numeric value (0-9).

Field Test Plan

(✓) Attempt to store alphabetic characters in the field. An error should result.

(✓) Attempt to enter a longer data value than allowed.

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.
   (✓) Only records matching the entered value should be displayed.

(✓) Accept the default.

(✓) Modify each default value with a valid alternative.

(✓) Modify each default value with an invalid alternative.

(✓) Attempt to delete an existing data field value. An error should result when <F10> or <Enter> are pressed.
   (✓) Use the space bar to attempt to delete the field data.
   (✓) Use clear field (F8) to attempt to delete the field data.

(✓) Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.

(✓) Test LOV:
   (✓) Select the first entry in the LOV.
   (✓) Select the last entry in the LOV.
   (✓) Use the FIND option and select an entry.
Attempt to store an invalid code. An error should result.

Field Prompt: Definition
Field Usage: Queryable Only
Field Name: CODE_DESCRIPTION

Field Help
This field contains a 1-30 character descriptive title of the data value.

Field Test Plan
- Enter query mode and verify that this field is accessible.
- Enter query mode and enter a valid value in this field.
- Only records matching the entered value should be displayed.
- Attempt to store an invalid code. An error should result.
Field Prompt: Text?
Field Usage: Queryable Only
Field Name: FLAG_TEXT

Field Help

This field is a flag that identifies the presence of additional textual information about the data item. If "N" is displayed, no text is currently present. If "Y" is displayed, text of one or more types is present. To enter or display text, press F7. A popup screen will display the default text type for the data item. If this default text type is the one you want, you may either read or add text. If you want to use another available text type for the data item, press LOV (F9) to display and select the desired text type. Once you have entered any text into the database, the indicator flag for the data item will be set to "Y".

This data field:
- Provides a default value. To accept the default value, press the ENTER key or TAB key.
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

(✓) Enter query mode and verify that this field is accessible.
(✓) Enter query mode and enter a valid value in this field.
(✓) Only records matching the entered value should be displayed.

(✓) Test LOV:
   (✓) Select the first entry in the LOV.
   (✓) Select the last entry in the LOV.
   (✓) Use the FIND option and select an entry.

(✓) Press the TEXT key (F7). The text popup should be displayed.

(✓) With the cursor at the text type, press LOV (F9). Where available, a list of other text types available for the entry will be displayed. Select one text type for testing.

(✓) Press the ENTER key to move the cursor to the text block.

(✓) Enter two lines of text. The cursor should automatically move to the next line when one line is full.

(✓) Press the COMMIT key (F10). Press ENTER in response to prompt
until the popup disappears and the primary screen reappears.

(The text flag should be set to 'Y'.)

Select and update text that already exists.
LEMIS Module Test Checklist Report

Name: VIEW SAP CONSTITUENT RESULTS D
Short Name: LE5120U1
Purpose: To view sample results data.

Initial Test Date: 11-14-84
Verification Date: 12-10-84

Module Description

This will be a query only form used to view the sample results data. This module will consist of 4 blocks on 3 pages.

Block 1: Sample Analysis Plan (ID & Title)
- This block will be ordered by SAP Title (ASCENDING)

Block 2: Date Sampled and Data Value
- (FDL, DATE COLLECT START & SAP, LEVEL DATA VALID)
- This block will be ordered by Date Sampled (descending)

Block 3: Constituent Name and CAS #
- This block will be ordered by Constituent Name (descending)

Block 4: Sample Location Name, Result value, Units, Qualifier, and Purpose
- This block will be ordered by Location Name (ascending)

Page 1: 1 Line SAP block (block 1)
- n Line (as many as fit) Date Sampled block (2)
Page 2: Context fields for SAP (1) and Date Sampled (2)
- n Line constituent block (3)
Page 3: Context fields for SAP, Date Sampled, and Constituent
- n Line Results block (4)

The accessible data should be limited to the data owned by the user or of sufficient release level to allow the user’s role to see the:
Module Description

This transaction is used to view sampling results.

This form is 3 pages long and has 4 blocks:
1) Sample Analysis Plan (ID & Title)
2) Date Sampled and Data Value
3) Constituent Name and CAS #
4) Sample Location Name, Result value, Units, Qualifier, and Purpose

To view results data:

1) If the text "Enter a query; press Shift-12 to execute," does not appear at the bottom of the screen press <F12>.
2) Enter the SAP number and press <shift-F12>. The title for the SAP number and the Sample Schedule information for the selected SAP will be displayed.
3) Use the down and up arrow keys to select the desired SAP.
4) Press <Page Down> to move to the list of sample dates for the SAP.
5) Use the arrow keys to select the sample to view.
6) Press <Page Down> to move to page 2 of the form. This page is a list of the constituents and CAS numbers for the selected sample date.
7) Use the arrow keys to move the cursor to select the results to view.
8) Press <Page Down> to move to page 3 of the form. This page is a list of the results for the selected constituent.

UNIT TEST CHECKLIST

<table>
<thead>
<tr>
<th>✓</th>
<th>Module</th>
<th>Function Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓</td>
<td>Show Version</td>
<td>Shift-F10</td>
</tr>
<tr>
<td>✓</td>
<td>Comment/Bug</td>
<td>Shift-F3</td>
</tr>
<tr>
<td>✓</td>
<td>Fast Access</td>
<td>F5</td>
</tr>
<tr>
<td>✓</td>
<td>Back</td>
<td>F4 or Esc</td>
</tr>
<tr>
<td>✓</td>
<td>Main Menu</td>
<td>Shift-F4</td>
</tr>
<tr>
<td>✓</td>
<td>Key Template</td>
<td>Ctrl-F1</td>
</tr>
<tr>
<td>✓</td>
<td>Context Print</td>
<td>F11</td>
</tr>
<tr>
<td>✓</td>
<td>Query Print</td>
<td>Ctrl-F11</td>
</tr>
<tr>
<td>✓</td>
<td>Oracle Print</td>
<td>Shift-F11</td>
</tr>
</tbody>
</table>

Block Title: Event
Block Table: EVENT
### Block Title: Event
**Block Table: EVENT**

<table>
<thead>
<tr>
<th>Key</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help</td>
<td>F1</td>
</tr>
<tr>
<td>Online Doc</td>
<td>F2</td>
</tr>
<tr>
<td>Related Data</td>
<td>F3</td>
</tr>
<tr>
<td>Spec Func</td>
<td>Shift-F5</td>
</tr>
<tr>
<td>Home/End</td>
<td>Home/End</td>
</tr>
<tr>
<td>Scroll Up/Dn</td>
<td>Shift-Up/Dn</td>
</tr>
<tr>
<td>Prv/Nxt Rec</td>
<td>Up/Down</td>
</tr>
<tr>
<td>Clear Field</td>
<td>F8</td>
</tr>
<tr>
<td>Clear Form</td>
<td>Shift-F8</td>
</tr>
<tr>
<td>Insert Rec</td>
<td>Insert</td>
</tr>
<tr>
<td>Delete Rec</td>
<td>Delete</td>
</tr>
<tr>
<td>Enter Query</td>
<td>F12</td>
</tr>
<tr>
<td>Correct Query Fields?</td>
<td>Yes</td>
</tr>
<tr>
<td>Execute Qry</td>
<td>Shift-F12</td>
</tr>
</tbody>
</table>

### Block Title: Sample Dates
**Block Table: VIEW SAMPLE DATE**

<table>
<thead>
<tr>
<th>Key</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help</td>
<td>F1</td>
</tr>
<tr>
<td>Online Doc</td>
<td>F2</td>
</tr>
<tr>
<td>Related Data</td>
<td>F3</td>
</tr>
<tr>
<td>Spec Func</td>
<td>Shift-F5</td>
</tr>
<tr>
<td>Home/End</td>
<td>Home/End</td>
</tr>
<tr>
<td>Scroll Up/Dn</td>
<td>Shift-Up/Dn</td>
</tr>
<tr>
<td>Prv/Nxt Rec</td>
<td>Up/Down</td>
</tr>
<tr>
<td>Clear Field</td>
<td>F8</td>
</tr>
<tr>
<td>Clear Form</td>
<td>Shift-F8</td>
</tr>
<tr>
<td>Insert Rec</td>
<td>Insert</td>
</tr>
<tr>
<td>Delete Rec</td>
<td>Delete</td>
</tr>
<tr>
<td>Enter Query</td>
<td>F12</td>
</tr>
<tr>
<td>Correct Query Fields?</td>
<td>Yes</td>
</tr>
<tr>
<td>Execute Qry</td>
<td>Shift-F12</td>
</tr>
</tbody>
</table>
Testing of the transaction is performed at four levels:

1. Developer testing.
2. Secondary testing.
3. End user testing.
4. Production release & verification.

As each applicable section of this test plan is completed, the designated individual responsible for the section will sign the plan in the appropriate places. Each check off item will be completed.

The status of the transaction will be updated in the data dictionary.

The transaction progresses through the development and test steps.

Developer Testing

As each individual transaction is generated, the developer performs tests against the transaction to insure that it meets specifications and works properly. Upon successful completion of this testing, the transaction is made available for secondary testing.

Test status conditions are:

1. Transaction under development, untested.
2. Transaction added to menu and security.
3. Transaction moved to development directory (addmod).
4. Help added.
5. Unit Test checklist completed.
6. Specific test plan added (if needed).
7. Any bugs found in Unit test fixed.
8. Updated test booker printed.
9. Initial unit testing complete.

Developer [Signature] Date Complete 2/7/94

Secondary Testing

Secondary testing is performed by a person external to the development team. Tests are performed using a standardized test checklist. Initial testing is performed to ensure that the transaction meets the functional requirements of the transaction and satisfies the test plan narrative that follows:

1. Secondary testing in progress.
2. Secondary testing complete, problems found. Resolution
3. Unable to resolve problem at this time.
4. Problem resolution complete.
5. Secondary testing complete, no problems found.

Tester [Signature] Date Complete 2/14/94

When problems are found:

1. The tester passes the checklist to the project manager for review and action.
2. The project manager assigns the checklist to the developer of the transaction for correction of the problems.
3. The developer corrects the described problems, records the corrective actions taken and the number of hours of corrective effort used, tests the transaction for correct operation, and returns the checklist to the project manager.

4. The project manager returns the checklist to the tester for retesting.

The above sequence of events repeats until the tester signs off the transaction as passing the test requirements.

End User Testing

The transaction is tested by end users for a predetermined time period. This testing is done in the development environment. If no problems are encountered, or all problems are resolved at the end of this time period, the module is ready for Project Manager review.

( ) 9 - End User testing in progress.
( ) 10 - Problem found, resolution in progress.
( ) 11 - Problem resolution complete.
   Developer: ___________________________ Date Complete: ________________________
( ) 12 - Resolution verified.
   Tester: ___________________________ Date Complete: ________________________

Production Status:

( ) 13 - Ready for Project Manager/System Architect review.
   ( ) The Project Manager or System Architect reviews all test results and determines that the transaction has completed testing.
   Architect/Manager: ___________________________ Date Complete: 2/14/94

( ) 14 - The transaction is ready to be placed into production.
   ( ) Software files moved to production directory.
   ( ) Transaction added to production menu.
   ( ) Transaction access given to production roles.
   ( ) Validation test performed in production.
   ( ) Production documentation up to date.
( ) 15 - The transaction has been put into production

By: ___________________________ Date Done: 2/14/94

Module Test Plan

( ) Display transaction help. Verify that the narrative adequately describes the purpose and functions of the transaction in end-user terms.

( ) Transaction help describes:
   ( ) Purpose of the transaction: ___________________________
   ( ) # of transaction related files: ________________________
   ( ) Files related to this transaction: ______________________
   ( ) Knowledge of this transaction:
   ( ) User documentation:
   ( ) Knowledge of this transaction:
   ( ) Knowledge of this transaction:
   ( ) Knowledge of this transaction:
Block Title: Event
Block Table: EVENT
Block Usage: Query Only.

Block Help:
This table stores data relating to an event, including the event identifier, title, event type and related text flag.

An event is defined as a TPA Requirement, Project, QAPP, Task, SAP, or SAF.

Block Test Plan:

(✓) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

(✓) Block help describes:
   (✓) Purpose of the block
   (✓) Options available in the block
   (✓) The relationship of the block to the transaction or to the principal parent block of the transaction

(✓) Where block synchronization is used, ensure that the block data
Block Test Plan.

- is in sync with the parent block.

(✓) Query functionality:
  (✓) Query a single record.
  (✓) Pressing the F12 key clears the record and permits entering a second query.
  (✓) Query multiple records using wildcards: "%" & "_"

✓ verify that the data queries in the block are ordered logically.

Field Prompt: SAP
Field Usage: Non Updateable
Field Name: IDENT EVENT

Field Help:
This field uniquely identifies the event (Requirement, Project, QAPP, SAP, or SA) to the database.
An error will occur if you attempt to enter a identification value already present in the database.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan:

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.
(✓) Only records matching the entered value should be displayed.
Field Prompt: Title
Field Usage: Queryable Only
Field Name: TITLE_EVENT

Field Help

Enter a 1-40 character descriptive title for the event.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

[X] Enter query mode and verify that this field is accessible.
(X) Enter query mode and enter a valid value in this field.
[X] Only records matching the entered value should be displayed.
Block Title: Sample Dates
Block Table: VIEW SAMPLE DATE
Block Usage: Query Only

Block Help

This view is used to display the sample date(s) that are tied to a particular SAP.

Block Test Plan

(✓) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

(✓) Block help describes:

( ) Purpose of the block
( ) Options available in the block
( ) The relationship of the block to the transaction or to the principal parent block of the transaction
( ) Navigation to other blocks of the transaction

(✓) Where block synchronization is used, ensure that the block data is in sync with the parent block.

(✓) Query functionality:

(✓) Query a single record,
      Pressing the F12 key clears the record and permits entering a second query.
(✓) Query multiple records using wildcards: "%" & "_"

(✓) Verify that the data queries in the block are ordered logically.

Field Prompt: Sample Date
Field Usage: Non Updateable
Field Name: DATE_COLLECT_START

Field Help

The field data collection date that sampling actually began, using the format MM/DD/YY where:

<table>
<thead>
<tr>
<th>MM</th>
<th>DD</th>
<th>YY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Field Test Plan
✓ Enter query mode and verify that this field is accessible.
✓ Enter query mode and enter a valid value in this field.
✓ Only records matching the entered value should be displayed.

Field Prompt: Data Value
Field Usage: Queryable Only
Field Name: LEVEL_DATA_VALID

Field Help

This field contains the current data validation level for the data item. The default value is "0" (zero). This identifies the data as raw and unvalidated. As the data is reviewed and validated, the validation level is changed to reflect the current state of the data.

Field Test Plan

✓ Enter query mode and verify that this field is accessible.
✓ Enter query mode and enter a valid value in this field.
✓ Only records matching the entered value should be displayed.

Field Prompt: CODE_DESCRIPTION
Field Usage: Non Updateable
Field Name: CODE_DESCRIPTION

Field Help

Field Test Plan

✓ Enter query mode and verify that this field is accessible.
✓ Enter query mode and enter a valid value in this field.
✓ Only records matching the entered value should be displayed.

* Field shouldn't be accessible when you first enter the block, you should not be able to type into the data value description field.
Block Title: Constituents
Block Table: VIEW_CONSTITUENTS
Block Usage: Query Only

Block Help

This view displays the constituents for a particular sample date of a particular SAP.

Block Test Plan

(✓) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

(✓) Block help describes:
   (✓) Purpose of the block
   (✓) Options available in the block
   (✓) The relationship of the block to the transaction or to the principal parent block of the transaction
   (✓) Navigation to other blocks of the transaction

(✓) Where block synchronization is used, ensure that the block data is in sync with the parent block.

(✓) Query functionality:
   (✓) Query a single record
   (✓) Pressing the F12 key clears the record and permits entering a second query.
   (✓) Query multiple records using wildcards: "%" & "_"

(✓) Verify that the data queries in the block are ordered logically.

Field Prompt: Constituent
Field Usage: Non Updateable
Field Name: NAME_CON_LONG

Field Help

This data field:
- May contain any character combination.
- Is the full length name of the constituent.

Field Test Plan

(✓) Enter query mode and verify that this field is accessible.
(✓) Enter query mode and enter a valid value in this field.
Only records matching the entered value should be displayed.

Field Prompt: CAS
Field Usage: Queryable Only
Field Name: IDENT_CAS

This data field:

- The Chemical Abstract Service number for the constituent

Field Test Plan

*. Enter query mode and verify that this field is accessible.
*. Enter query mode and enter a valid value in this field.
*. Only records matching the entered value should be displayed.

[Handwritten note: Should I be able to query by CAS # too?]
Block Title: Results
Block Table: VIEW_RESULTS
Block Usage: Query Only

This view displays the constituent results for a particular SAP.

Block Test Plan

Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

- Purpose of the block
- Options available in the block
- The relationship of the block to the transaction or to the principal parent block of the transaction
- Navigation to other blocks of the transaction

Where block synchronization is used, ensure that the block data is in sync with the parent block.

Query functionality:
- Query a single record.
- Pressing the F12 key clears the record and permits entering a second query.
- Query multiple records using wildcards: "%" & "_"

Verify that the data queries in the block are ordered logically.

Field Prompt: Location
Field Usage: Non Updateable
Field Name: TITLE_LOCATION

Enter query mode and verify that this field is accessible.
Enter query mode and enter a valid value in this field.
Only records matching the entered value should be displayed.

Field Prompt: Result
Field Usage: Queryable Only
Field Name: CONC_VALUE

Field Help:
The concentration value for the constituent. This field only allows three decimal places.

This field:
- Must contain a numeric value - 0-9,'.', or

Field Test Plan:

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.
(✓) Only records matching the entered value should be displayed.

(✓) Attempt to store decimal data. Data to the limit of the decimal places provided by the field definition will be allowed.
(✓) Help for the field should identify the number of decimal places allowed.
(✓) Store a data value without decimal. The value should be zero to the right of the decimal place.
(✓) Store a single digit decimal value.
(✓) Store a decimal value to the maximum number of allowed decimal positions.
(✓) Store a decimal value greater than the maximum number of allowed decimal positions. An error should occur.
Field Prompt: Units
Field Usage: Queryable Only
Field Name: CONC_UNIT_MEASURE

Field Help:
The unit of measure to be used in conjunction with the concentration value for the constituent.

Field Test Plan

1. Enter query mode and verify that this field is accessible.
2. Enter query mode and enter a valid value in this field.
   Only records matching the entered value should be displayed.

Field Prompt: Qual
Field Usage: Non Updateable
Field Name: QUALIFIER

Field Help:
The qualifier set by the LAB.

Field Test Plan

1. Enter query mode and verify that this field is accessible.
2. Enter query mode and enter a valid value in this field.
   Only records matching the entered value should be displayed.

Field Prompt: Purpose
Field Usage: Undefined
Field Name: DESCRIPTION

Field Help:

Field Test Plan
DESCRIPTION

11-Feb-94 RTA. Transaction help (#3) says "SAF" and it should say "SAP".
Application: LEMIS | Instance: TEST

Transaction: LE5120U1 View Sample Results Data

<table>
<thead>
<tr>
<th>Status</th>
<th>ASSIGNED</th>
<th>Date: 11-FEB-94</th>
<th>Class:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>PROBLEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disposition</td>
<td>KEVIN SHERROD</td>
</tr>
<tr>
<td>Entered By</td>
<td>TODD ADAMS</td>
</tr>
<tr>
<td>Access Role</td>
<td>REGULATOR</td>
</tr>
<tr>
<td>System ID</td>
<td>VIEW_SAMPLE_DATE</td>
</tr>
<tr>
<td>Block</td>
<td>VSD</td>
</tr>
<tr>
<td>Field</td>
<td>VSD.CODE_DESCRIPTION</td>
</tr>
</tbody>
</table>

**DESCRIPTION**

11-Feb-94 RTA. Form lets me tab into the code description field. The only field that should be accesable in this block is the sample date.

**CORRECTIVE ACTION**

2/11/94 - kws - Made the fields LEVEL_DATA_VALID and CODE_DESCRIPTION non-enterable.
Transaction: LE5120U1 View Sample Results Data

Comment ID: 139 Priority: MED Date: 11-FEB-94

Status: ASSIGNED  Date: 11-FEB-94  Class: PROBLEM

Disposition: KEVIN SHERROD
Entered By:  T**OD ADAMS
Access Role: REGULATOR
System ID:
Last Error:
Last Msg: FRM-40407  Transaction complete -- posted records comm
Block: VIEW_CONSTITUENTS
Field: VC.NAME_CON_LONG

Oracle ROWID:

DESCRIPTION

11-Feb-94  RTA. Shouldn't we be able to query by the CAS # as well as the constituent?

CORRECTIVE ACTION

2/11/94 - kws - This was not a problem.
LEMIS Module Test Checklist Report

Name: SAMPLE QUERY
Short Name: LE5130U1
Purpose: To view SAP#, TITLE, Sample Date, and Location

Initial Test Date: 03-04-94
Verification Date: [Signature]

Module Description

This will be a query only form used to view SAP number, SAP title, Sample Date, and Sample Location from a single field query of a HEIS - Sample Number.

Block 1: Sample
This one and only data block is a query only block displaying SAP number, SAP title, Sample Date, and Sample Location from a query of the HEIS/Sample number.

Module Help

This transaction is used to view SAP number, SAP title, Sample Date, and Sample Location from a query of the HEIS/Sample Number.

To view Sample information:

1) If the text "Enter a query; press Shift-12 to execute, " does not appear at the bottom of the screen press <F12>.
2) Enter the HEIS number and press <shift-F12>. The SAP number, SAP title, Sample Date, and Sample Location for the selected HEIS number will be displayed.
3) Use the down and up arrow keys to select the desired HEIS number.
UNIT TEST CHECKLIST

( ) Module Function Key

<table>
<thead>
<tr>
<th>Function</th>
<th>Key Combination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show Version</td>
<td>Shift-F10</td>
</tr>
<tr>
<td>Comment/Bug</td>
<td>Shift-F3</td>
</tr>
<tr>
<td>Fast Access</td>
<td>F5</td>
</tr>
<tr>
<td>Back</td>
<td>F4 or Esc</td>
</tr>
<tr>
<td>Main Menu</td>
<td>Shift-F4</td>
</tr>
<tr>
<td>Key Template</td>
<td>Ctrl-F1</td>
</tr>
<tr>
<td>Context Prnt</td>
<td>F11</td>
</tr>
<tr>
<td>Query Prnt</td>
<td>Ctrl-F11</td>
</tr>
<tr>
<td>Oracle Prnt</td>
<td>Shift-F11</td>
</tr>
</tbody>
</table>

( ) Block Title: SAMPLE

<table>
<thead>
<tr>
<th>Function</th>
<th>Key Combination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help</td>
<td>F1</td>
</tr>
<tr>
<td>Online Doc</td>
<td>F2</td>
</tr>
<tr>
<td>Related Data</td>
<td>F3</td>
</tr>
<tr>
<td>Spec Func 1</td>
<td>Shift-F5</td>
</tr>
<tr>
<td>Spec Func 2</td>
<td>Ctrl-F5</td>
</tr>
<tr>
<td>Home/End</td>
<td>Home/End</td>
</tr>
<tr>
<td>Prv/Nxt Block</td>
<td>PgDn/PgUp</td>
</tr>
<tr>
<td>Prv/Nxt Field</td>
<td>Tab/Sh-Tb</td>
</tr>
<tr>
<td>Commit Form</td>
<td>F10</td>
</tr>
<tr>
<td>Clear Field</td>
<td>F8</td>
</tr>
<tr>
<td>Clear Form</td>
<td>Shift-F8</td>
</tr>
<tr>
<td>Exit System</td>
<td>Ctrl-F4</td>
</tr>
<tr>
<td>Insert Rec</td>
<td>Insert</td>
</tr>
<tr>
<td>Delete Rec</td>
<td>Delete</td>
</tr>
<tr>
<td>Add record at end</td>
<td></td>
</tr>
<tr>
<td>Duplicate Rec</td>
<td>F6</td>
</tr>
<tr>
<td>Count Query</td>
<td>Ctrl-F12</td>
</tr>
<tr>
<td>Uppercase and LOVs?</td>
<td></td>
</tr>
<tr>
<td>Correct Query Order?</td>
<td></td>
</tr>
<tr>
<td>Execute Qry</td>
<td>Shift-F12</td>
</tr>
</tbody>
</table>

TEST PLAN

Testing of the transaction is performed at four levels:

1. Developer testing.
2. Secondary testing.
3. End user testing.
4. Production release & verification.

As each applicable section of this test plan is completed, the designated individual responsible for the section will sign the plan in the appropriate places. Each check off item will be completed. The status of the transaction will be updated in the data dictionary as the transaction progresses through the development and test steps.
Developer Testing

As each individual transaction is generated, the developer performs tests against the transaction to insure that it meets specifications and works properly. Upon successful completion of this testing, the transaction is made available for secondary testing.

Test status conditions are:

1. Transaction under development, untested.
   - Transaction moved to development directory (addmod).

2. Development complete, initial unit testing in progress.
   - Help added
   - Unit Test checklist completed.
   - Specific test plan added (if needed).
   - Any bugs found in Unit test fixed.
   - Updated test booklet printed.

3. Initial unit testing complete.

Secondary Testing

Secondary testing is performed by a person external to the development team. Tests are performed using a standardized test checklist. Initial testing is performed to ensure that the transaction meets the functional requirements of the transaction and satisfies the test plan narrative that follows.

( ) 4 - Secondary testing in progress.
( ) 5 - Secondary testing complete, problems found. Resolution in progress.
( ) 6 - Unable to resolve problem at this time.
( ) 7 - Problem resolution complete.
( ) 8 - Secondary testing complete, no problems found.

When problems are found:

1. The tester passes the checklist to the project manager for review and action.
2. The project manager assigns the checklist to the developer of the transaction for correction of the problems.
3. The developer corrects the described problems, records the corrective actions taken and the number of hours of corrective effort used, tests the transaction for correct operation, and returns the checklist to the project manager.
4. The project manager returns the checklist to the tester for retesting.

The above sequence of events repeats until the tester signs off.
the transaction as passing the test requirements.

End User Testing

The transaction is tested by end users for a predetermined time period. This testing is done in the development environment. If no problems are encountered, or all problems are resolved at the end of this time period, the module is ready for Project Manager review.

( ) 9 - End User testing in progress.
( ) 10 - Problem found, resolution in progress.
( ) 11 - Problem resolution complete.
    Developer _____________ Date Complete ________
    Tester _____________ Date Complete ________

Production Status

(✓) 13 - Ready for Project Manager/System Architect review.
    (✓) The Project Manager or System Architect reviews all test results and determines that the transaction has completed testing.
    Architect/Manager ___________________ Date Complete 3/21/94

( ) 14 - The transaction is ready to be placed into production.
    ( ) Software files moved to production directory.
    ( ) Transaction added to production menu.
    ( ) Transaction access given to production roles.
    ( ) Validation test performed in production.
    ( ) Production documentation up to date.

( ) 15 - The transaction has been put into production

By _____________ Date Done __________

Module Test Plan
---------------------------------------

(✓) Display transaction help. Verify that the narrative adequately describes the purpose and functions of the transaction in end-user terms.

(✓) Transaction help describes:
(✓) Purpose of the transaction
(✓) Functions performed by the transaction
(✓) Where multiple block, what happens in each block.

Block Title:
Block Table: SAMPLE
Block Usage: Query Only
Block Help

This block shows the list of samples that have been defined for Block Test Plan

(!) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

(!) Block help describes:

(!) Purpose of the block
(!) Options available in the block
(!) The relationship of the block to the transaction or to the principal parent block of the transaction
(!) Navigation to other blocks of the transaction

(!) Query functionality:

(!) Query a single record.
(!) Pressing the F12 key clears the record and permits entering a second query.

(!) Query multiple records using wildcards: "%" & "_"

Field Prompt: HEIS Number
Field Usage: Non Updateable
Field Name: IDENT_SAMPLE

Field Help

This field uniquely identifies the sample to the database. An error will occur if you attempt to enter a identification value already present in the database. These records are automatically created with a temporary Sample ID. When the field data is entered, the HEIS number will be entered as the Sample ID.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

(!) Enter query mode and verify that this field is accessible.
(!) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.
Module Test Checklist Report for TLEMIS

Name: VIEW SAF STATUS
Short Name: LE5140U1
Purpose: To view SAFs and their current Data Value Cod

Initial Test Date: 7/4/94
Verification Date: 6/27/94

Module Description
-----------------
This module is used to display one or more SAFs, along with the associated Data Value Code and the date it was last updated.

Module Help
----------
Use this module to select and display one or more SAF's to determine the current data value code for each one selected. The SAF Number, SAP Title, Data Value Code (DVC) and the date the DVC was last changed will be displayed.

Upon entry into this module, you will be in query mode, which means all you have to do is enter the SAF Identifier you wish to see and press <Shift-F12>, or don't enter anything and press <Shift-F12> to see all SAF's currently in the system. You may also query on the DVC by tabbing over to the DVC column, entering the DVC Number that you wish to see, and press <Shift-F12>. The third option is to query by date last modified, and you can do this by tabbing to the date last modified, entering the date you wish to query on (in the format: MM/DD/YY), then press <Shift-F12>. Remember: you may use the wildcard character (*) whenever you are doing a query, so for instance, if you want to see all SAFs that had the DVC changed in June of 1994, you would do the following:
Module Help
---------------

1) Enter the form. Tab over to the "Last Modified" field.
2) Enter: 06/6/94.
3) Press <Shift-F12>.
4) All SAF's that had the DVC updated in June, 1994 will be displayed.

** If you want a printout of all the SAF's with their current Data Value Codes, press <F11> and you will get a full listing.

UNIT TEST CHECKLIST

( ) Module Function Key

<table>
<thead>
<tr>
<th>Function</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show Version</td>
<td>Shift-F10</td>
</tr>
<tr>
<td>Comment/Bug</td>
<td>Shift-F3</td>
</tr>
<tr>
<td>Fast Access</td>
<td>F5</td>
</tr>
<tr>
<td>Back</td>
<td>F4 or Esc</td>
</tr>
<tr>
<td>Main Menu</td>
<td>Shift-F4</td>
</tr>
<tr>
<td>Key Template</td>
<td>Ctrl-F1</td>
</tr>
<tr>
<td>Context Prnt</td>
<td>F11</td>
</tr>
<tr>
<td>Query Print</td>
<td>Ctrl-F11</td>
</tr>
<tr>
<td>Oracle Print</td>
<td>Shift-F11</td>
</tr>
</tbody>
</table>

( ) Block Title: Sample Authorization

Block Table: SAMPLE_AUTHORIZATION

<table>
<thead>
<tr>
<th>Function</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help</td>
<td>F1</td>
</tr>
<tr>
<td>Online Doc</td>
<td>F2</td>
</tr>
<tr>
<td>Related Data</td>
<td>F3</td>
</tr>
<tr>
<td>Spec Func 1</td>
<td>Shift-F5</td>
</tr>
<tr>
<td>Home/End</td>
<td>Home/End</td>
</tr>
<tr>
<td>Scroll Up/Dn</td>
<td>Shft-Up/Dn</td>
</tr>
<tr>
<td>Prv/Nxt Rec</td>
<td>Up/Down</td>
</tr>
<tr>
<td>Clear Field</td>
<td>F8</td>
</tr>
<tr>
<td>Clear Form</td>
<td>Shift-F8</td>
</tr>
<tr>
<td>Insert Rec</td>
<td>Insert</td>
</tr>
<tr>
<td>Delete Rec</td>
<td>Delete</td>
</tr>
<tr>
<td>Enter Query</td>
<td>F12</td>
</tr>
<tr>
<td>Count Query</td>
<td>Ctrl-F12</td>
</tr>
<tr>
<td>Correct Query</td>
<td>Ctrl-F12</td>
</tr>
<tr>
<td>Upper Case</td>
<td>F12</td>
</tr>
<tr>
<td>Duplicate Rec</td>
<td>F6</td>
</tr>
<tr>
<td>Correct Query</td>
<td>Shift-F12</td>
</tr>
<tr>
<td>Execute Qry</td>
<td>Shift-F12</td>
</tr>
</tbody>
</table>

438
TRANSACTION TEST PLAN CHECKLIST

This checklist should be filled out as directed in the project management procedures for this project.

Developer Testing

( ) 1 - Transaction under development, untested.
( ) 2 - Development complete, initial unit testing in progress.
( ) 3 - Initial unit testing complete.
( ) 4 - Transaction moved to development directory (addmod).
( ) Specific test plan text added (if needed).
( ) Final test booklet printed.
( ) Unit Test checklist completed.
( ) Any bugs found in Unit test fixed.

Developer ____________________________ Date Complete 6/15/94

Secondary Testing

( ) 4 - Secondary testing in progress.
( ) 5 - Secondary testing complete, problems found.
( ) 6 - Unable to resolve problem at this time.
( ) 7 - Problem resolution complete.
( ) 8 - Secondary testing complete, no problems found.

Tester ____________________________ Date Complete

End User Testing in Development

( ) 9 - End User testing in progress.
( ) 10 - Problem found, resolution in progress.
( ) 11 - Problem resolution complete.

Developer ____________________________ Date Complete

Tester ____________________________ Date Complete

Production Release and System Test in Production

( ) 13 - Ready for Project Manager/System Architect review.
( ) 14 - The transaction is ready to be placed into production.
( ) 15 - The transaction has been put into production.

Architect/Manager ____________________________ Date Complete

Software files moved to production directory.
Transaction added to production menu.
Transaction access given to production roles.
Production documentation up to date.
16 - System test has been performed in production.

By ____________ Date Done _________

End user testing and acceptance in production.

17 - The end user has tested and accepted the transaction.

User ____________ By __________ Date ________

Block Title: Sample Authorization
Block Table: SAMPLE AUTHORIZATION
Block Usage: Query Only

Block Help

This block contains the header information for the SAF (Sample Authorization Form). This includes the SAF ID, Date the sampling activity has been requested, and a few descriptive fields about this sampling activity. The detailed information for this SAF will be entered in subsequent blocks.

Block Test Plan

(/) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

(/) Block help describes:

(/) Purpose of the block
(/) Options available in the block
(/) The relationship of the block to the transaction or to the principal parent block of the transaction
(/) Navigation to other blocks of the transaction

(/) Where block synchronization is used, ensure that the block data is in sync with the parent block.

(/) Query functionality:

(/) Query a single record.
(/) Pressing the F12 key clears the record and permits entering a second query.
(/) Query multiple records using wildcards: "%" & "_*"
Field Prompt: SAF Id
Field Usage: Non Updateable
Field Name: IDENT_SAF

Field Help
---------------------------------------------------------------
The SAF ID should uniquely identify the SAF. If '. ' is entered then
the SAF ID will be defaulted to the SAP ID with a sequence number.

This data field:
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.
- May contain any character combination.

Field Test Plan
---------------------------------------------------------------
( // Enter query mode and verify that this field is accessible.
( // Enter query mode and enter a valid value in this field.
( // Only records matching the entered value should be displayed.
( // Verify that the data entry is forced into uppercase.

Field Prompt: DVC
Field Usage: Queryable Only
Field Name: LEVEL_DATA_VALID

Field Help
---------------------------------------------------------------
This field contains the current data validation level for
the data item. The default value is "0" (zero). This
identifies the data as raw and unvalidated. As the data
is reviewed and validated, the validation level is
changed to reflect the current state of the data. Use LOV
to display the list of current valid validation levels.

This data field:
- Provides a default value. To accept the default value, press the
  ENTER key or TAB key.
- Must contain a valid value. A blank is not allowed.
- Must contain a numeric value (0-9).

Field Test Plan
---------------------------------------------------------------
( // Enter query mode and verify that this field is accessible.
( // Enter query mode and enter a valid value in this field.
( // Only records matching the entered value should be displayed.
Accept the default.
Modify each default value with a valid alternative.
Modify each default value with an invalid alternative.
Attempt to store an invalid code. An error should result.

Field Prompt: Last Modification  
Field Usage: Queryable Only  
Field Name: DVC_UPDATE

Field Test Plan

Enter query mode and verify that this field is accessible.

Enter query mode and enter a valid value in this field.  
Only records matching the entered value should be displayed.
2.1 MAINTAIN LEVEL_DATA_Valid FOR ROLES

LEMIS Module Test Checklist Report

Name: MAINTAIN LEVEL_DATA_Valid FOR
Short Name: GE2220U1
Purpose: To maintain relationship between level_data_valid for roles.

Initial Test Date: 6/9/93
Verification Date: 6/19/93

Module Description
This transaction sets the validation levels that are related to a role. The RELATIONSHIP field determines the meaning of the relationship.

Module Help
This transaction is used to enter/update validation levels that are associated with a role. The relationship will define the meaning of the relationship. There are two blocks: 1) a Query only Role block, and 2) An updateable block for the related validation level.

To add a new related validation level:
1) Enter query mode by pressing <F12>.
2) Enter the desired application ID and role ID and press <Shift-F12>.
3) Press <PageDown> to move to the related validation level block.
4) Press <Insert> or use the arrow keys to move to an open record.
5) Enter the desired validation level (list of values is available).
6) Enter the desired relationship (list of values available).
7) Press <F10> to commit your record.
UNIT TEST CHECKLIST

( ) Module Function Key

\begin{itemize}
\item Show Version : Shift-F10
\item Comment/Bug : Shift-F3
\item Fast Access : F5
\item Back : F4 or Esc
\item Main Menu : Shift-F4
\item Key Template : Ctrl-F1
\item Context Print : F11
\item Query Print : Ctrl-F11
\item Oracle Print : Shift-F11
\end{itemize}

( ) Block Title: Role
Block Table: ROLE

\begin{itemize}
\item Help : F1
\item Online Doc : F2
\item Related Data : F3
\item Spec Func 1 : Shift-F5
\item Spec Func 2 : Ctrl-F5
\item Home/End : Home/End
\item Scroll Up/Dn : Shift-Up/Dn
\item Prev/Nxt Rec : Up/Down
\item Clear Field : F8
\item Clear Form : Shift-F8
\item Enter Query : F12
\item Correct Query Fields? : Ctrl-F12
\item Count Query : Ctrl-F12
\item Uppercase and LOVs? : Ctrl-F12
\item Correct Query Order? : Ctrl-F12
\end{itemize}
<table>
<thead>
<tr>
<th>Action</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help</td>
<td>F1</td>
</tr>
<tr>
<td>Online Doc</td>
<td>F2</td>
</tr>
<tr>
<td>Related Data</td>
<td>F3</td>
</tr>
<tr>
<td>Spec Func 1</td>
<td>Shift-F5</td>
</tr>
<tr>
<td>Home/End</td>
<td>Ctrl-F12</td>
</tr>
<tr>
<td>Prv/Nxt Rec</td>
<td>F4</td>
</tr>
<tr>
<td>Clear Field</td>
<td>F8</td>
</tr>
<tr>
<td>Clear Form</td>
<td>Shift-F8</td>
</tr>
<tr>
<td>Enter Query</td>
<td>F12</td>
</tr>
<tr>
<td>Correct Query Fields?</td>
<td>F13</td>
</tr>
<tr>
<td>Execute Qry</td>
<td>Shift-F12</td>
</tr>
<tr>
<td>Insert Rec</td>
<td>F14</td>
</tr>
<tr>
<td>Mandatory checks OK?</td>
<td>F15</td>
</tr>
<tr>
<td>List of Values OK?</td>
<td>F16</td>
</tr>
<tr>
<td>Duplicate Rec: F6</td>
<td>F17</td>
</tr>
<tr>
<td>Optional fields marked?</td>
<td>F18</td>
</tr>
</tbody>
</table>

**TEST PLAN**

Testing of the transaction is performed at four levels:

1. Developer testing.
2. Secondary testing.
3. End user testing.
4. Production release & verification.

As each applicable section of this test plan is completed, the designated individual responsible for the section will sign the plan in the appropriate places. Each check off item will be completed. The status of the transaction will be updated in the data dictionary as the transaction progresses through the development and test steps.

**Developer Testing**

As each individual transaction is generated, the developer performs tests against the transaction to insure that it meets specifications and works properly. Upon successful completion of this testing, the transaction is made available for secondary testing.

Test status conditions are:
( ) 1 - Transaction under development, untested.
   ( ) Transaction added to menu and security.
   ( ) Transaction moved to development directory (addmod).
( ) 2 - Development complete, initial unit testing in progress.
   ( ) Help added
   ( ) Unit Test checklist completed.
   ( ) Specific test plan added (if needed).
   ( ) Any bugs found in Unit test fixed.
   ( ) Updated test booklet printed.
( ) 3 - Initial unit testing complete.
     Developer ______________ Date Complete ____

Secondary Testing

Secondary testing is performed by a person external to the
development team. Tests are performed using a standardized test
checklist. Initial testing is performed to ensure that the
transaction meets the functional requirements of the transaction and
satisfies the test plan narrative that follows.

( ) 4 - Secondary testing in progress.
( ) 5 - Secondary testing complete, problems found. Resolution
     in progress.
( ) 6 - Unable to resolve problem at this time.
( ) 7 - Problem resolution complete.
( ) 8 - Secondary testing complete, no problems found.
     Tester ______________ Date Complete 6/3/93

When problems are found:
1. The tester passes the checklist to the project manager for
   review and action.
2. The project manager assigns the checklist to the developer of
   the transaction for correction of the problems.
3. The developer corrects the described problems, records the
   corrective actions taken and the number of hours of
   corrective effort used, tests the transaction for correct
   operation, and returns the checklist to the project manager.
4. The project manager returns the checklist to the tester for
   retesting.

The above sequence of events repeats until the tester signs off
the transaction as passing the test requirements.

End User Testing

The transaction is tested by end users for a predetermined time
period. This testing is done in the development environment. If no
problems are encountered, or all problems are resolved at the end of
this time period, the module is ready for Project Manager review.
9 - End User testing in progress.

10 - Problem found, resolution in progress.

11 - Problem resolution complete.

12 - Resolution verified.

Developer ______________ Date Complete ______

Tester ______________ Date Complete ______

Production Status

13 - Ready for Project Manager/System Architect review.
   The Project Manager or System Architect reviews all test results and determines that the transaction has completed testing.

Architect/Manager __________________ Date Complete 6/26/93

14 - The transaction is ready to be placed into production.
   - Software files moved to production directory.
   - Transaction added to production menu.
   - Transaction access given to production roles.
   - Validation test performed in production.
   - Production documentation up to date.

15 - The transaction has been put into production
   By __________________ Date Done 6/29/93

Module Test Plan

Display transaction help. Verify that the narrative adequately describes the purpose and functions of the transaction in end-user terms.

Transaction help describes:
- Purpose of the transaction
- Functions performed by the transaction
- Where multiple block, what happens in each block

Block Title: Role
Block Table: ROLE
Block Usage: Query Only

Block Help
This table contains a list of the roles defined by the system.
All transaction access in the system is determined by means of these 'Roles'.

This table includes an identifier for the role, as well as a more descriptive title.
Block Test Plan

Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

- Block help describes:
  - Purpose of the block
  - Options available in the block
  - The relationship of the block to the transaction or to the principal parent block of the transaction
  - Navigation to other blocks of the transaction

Where block synchronization is used, ensure that the block data is in sync with the parent block.

Query a single record:

- A single record is retrieved.
- Pressing the F12 key clears the record and permits entering a second query.
- The second query successfully retrieves the desired data.

Query multiple records using wild cards:

- Pressing F12 clears the block and makes the block ready for a query.
- A query composed of a trailing % wildcard retrieves the desired data.
- A query using a prefix % wildcard retrieves the correct data.
- A query using both prefix and suffix % wildcards retrieves the correct data.
- A query using the underscore (_) position wildcard retrieves the correct data.

Verify that the data queries in the block are ordered logically.

Field Prompt:
Field Usage: Non Updateable
Field Name: IDENT_APPLICATION

Field Help
This field indicates the application that owns this role. Each role is used in only one application.

This data field:
- May contain any character combination.
Field Help

- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

(✓) Enter query mode and verify that this field is accessible.
(✓) Enter query mode and enter a valid value in this field.
    (✓) Only records matching the entered value should be displayed.

(✓) Enter a duplicate value. An error should occur.
(✓) From LOV, select a value already present in the database. An error should occur.

Field Prompt: Role
Field Usage: Non Updateable
Field Name: IDENT_ROLE

Field Help

This field is a 12 character unique text used to identify the role. It is stored in the database as the owner of the data. It should describe the role if possible.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

(✓) Enter query mode and verify that this field is accessible.
(✓) Enter query mode and enter a valid value in this field.
    (✓) Only records matching the entered value should be displayed.
(✓) Enter a duplicate value. An error should occur.
(✓) From LOV, select a value already present in the database. An error should occur.
Field Prompt: Title
Field Usage: Non Updateable
Field Name: TITLE_ROLE

Field Help

Enter a 1-40 title for the data item. The title should be used by the software to more efficiently support the database in all caps form.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.
Block Title: Role Valid Level J  
Block Table: ROLE VALID_LEVEL_J  
Block Usage: Undefined

Block Help

This table is used to store the relationships between specific access ROLES and validation levels. The value in the RELATIONSHIP field defines the meaning of the relationship.

Block Test Plan

(!) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

(!) Block help describes:

(!) Purpose of the block
(!) Options available in the block
(!) The relationship of the block to the transaction or to the principal parent block of the transaction
(!) Navigation to other blocks of the transaction

(!) Where block synchronization is used, ensure that the block data is in sync with the parent block.

(!) Query a single record:

(!) A single record is retrieved.
(!) Pressing the F12 key clears the record and permits entering a second query.
(!) The second query successfully retrieves the desired data.

(!) Query multiple records using wild cards:

(!) Pressing F12 clears the block and makes the block ready for a query.
(!) A query composed of a trailing % wildcard retrieves the desired data.
(!) A query using a prefix % wildcard retrieves the correct data.
(!) A query using both prefix and suffix % wildcards retrieves the correct data.
(!) A query using the underscore (_) position wildcard retrieves the correct data.

(!) Verify that the data queries in the block are ordered logically.

(!) Store a series of records using the F6 [duplicate record] key to carry forward field values from the previously stored record.
Field Prompt: Va
Field Usage: Non Updateable
Field Name: LEVEL_DATA_VALID

Field Help

The validation level is used to determine who is allowed to see the data. The higher the validation level, the wider the access. Use the List of Values function <F9> to see the meaning of each validation level.

This data field:
- Provides a default value. To accept the default value, press the ENTER or TAB key.
- Must contain a valid value. A blank is not allowed.
- Must contain a numeric value (0-9)

Field Test Plan

( ) Attempt to store alphabetic characters in the field. An error should result.
( ) Begin the field entry with a space. An error should result.
( ) Attempt to enter a longer data value than allowed.
( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.
( ) Attempt to change data in the field. An error should result.
   ( ) Use the spacebar to attempt to change data.
   ( ) Use the clear field key (F8) to attempt to change data.
( ) Attempt to delete data in the field. An error should result.
   ( ) Use the spacebar to attempt to delete data.
   ( ) Use the clear field key (F8) to attempt to delete data.
( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.
( ) Attempt to enter a decimal value. An error should occur.
( ) Accept the default.
( ) Modify each default value with a valid alternative.
( ) Modify each default value with an invalid alternative.
( ) Attempt to delete an existing data field value. An error should result when <F10> or <Enter> are pressed.
( ) Use the space bar to attempt to delete the field data.
( ) Use clear field (F8) to attempt to delete the field data.
( ) Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.
( ) Test/LOV:
( ) Select the first entry in the LOV.
( ) Select the last entry in the LOV.
( ) Use the FIND option and select an entry.
( ) Enter a duplicate value. An error should occur.
( ) From LOV, select a value already present in the database. An error should occur.
( ) Attempt to store an invalid code. An error should result.
Field Prompt: idation Level
Field Usage: Queryable Only
Field Name: CODE_DESCRIPTION

Field Help
This field contains a 1-30 character descriptive title of the data value.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Enter a duplicate value. An error should occur.

( ) From LOV, select a value already present in the database. An error should occur.

( ) Attempt to store an invalid code. An error should result.
Field Prompt: Relationship  
Field Usage: Non Updateable  
Field Name: RELATIONSHIP

Field Help
---------------------------------------------------------------------
This field indicates the relationship between the validation level and the role displayed above. Use List of Values <F9> to see the valid relationships and the meaning of each one.
---------------------------------------------------------------------
This data field:
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.
- May contain any character combination.

Field Test Plan
---------------------------------------------------------------------
( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.
( ) Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.
( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.
( ) Attempt to change data in the field. An error should result.
   ( ) Use the spacebar to attempt to change data.
   ( ) Use the clear field key (F8) to attempt to change data.
( ) Attempt to delete data in the field. An error should result.
   ( ) Use the spacebar to attempt to delete data.
   ( ) Use the clear field key (F8) to attempt to delete data.
( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.
( ) Accept the default.
( ) Modify each default value with a valid alternative.
( ) Modify each default value with an invalid alternative.
( ) Attempt to delete an existing data field value. An error should result when <F10> or <Enter> are pressed.
Use the space bar to attempt to delete the field data.
Use clear field (F8) to attempt to delete the field data.

Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.

Test LOV:
Select the first entry in the LOV.
Select the last entry in the LOV.
Use the FIND option and select an entry.

Enter a duplicate value. An error should occur.

From LOV, select a value already present in the database. An error should occur.

Attempt to enter an invalid relationship. An error should occur.
LEMIS Module Test Checklist Report

Name: MAINTAIN JUNCTION_LIST
Short Name: GE341OU1
Purpose: Maintain Junction List Table
Initial Test Date: 9/4/82
Verification Date: 3/15/83

Module Description
------------------
This transaction is used to add/delete/modify information in the junction list table. The junction list table is used by the related data navigation.

Module Help
-------------
This transaction is used to add/delete/modify information in the junction list table. The junction list table is used by the related data navigation.

Press <Shift-F5> to synchronize the TABLE NAVIGATION table with the junction table specified by the current record.

To enter a junction record for related data navigation:

1) Enter a brief description of this junction. This text will appear as the heading for the popup list of related records.
2) Enter the table that this junction record will navigate from. List of values is available. When <Enter> is pressed, the ID Column and Ident Col fields will be automatically filled if the program is able to find an ID and IDENT column.
3) If the ID column and/or IDENT columns are incorrect, use <Shift-Tab> to move the cursor to these fields and correct them.
Module Help

4) Enter the table that this junction will navigate to. LOV available. When <Enter> is pressed, the ID and Ident column fields will be automatically filled if the program is able to find an ID and IDENT column.

5) If these fields are correct, press <Enter> to skip to the "Junction" field. If not correct them.

6) Enter the junction table. This is the table in the database that defines the junction between the two tables above.

7) The From ID column and To ID column will have been defaulted from the values above. If they are incorrect, correct them.

8) Enter the transaction to call during navigation. This will be the transaction that will be executed if the user selects one of the related records.

9) Enter the Call Type. List of values is available and describes the various options.

UNIT TEST CHECKLIST

(/) Module . Function Key
----------------------
( ) Show Version : Shift-F10 :
( ) Comment/Bug : Shift-F3 :
( ) Fast Access : F5 :
( ) Back : F4 or Esc :
( ) Main Menu : Shift-F4 :
( ) Key Template : Ctrl-F1 :
( ) Context Print : F11 :
( ) Query Print : Ctrl-F11 :
( ) Oracle Print : Shift-F11 :

( ) Block Title: List of Navigable Junctions
Block Table: JUNCTION_LIST

<table>
<thead>
<tr>
<th>( )</th>
<th>Help</th>
<th>: F1</th>
<th>( )</th>
<th>Key Help</th>
<th>: Shift-F1</th>
</tr>
</thead>
<tbody>
<tr>
<td>( )</td>
<td>Online Doc</td>
<td>: F2</td>
<td>( )</td>
<td>Prev/Next Block</td>
<td>: PgDn/PgUp</td>
</tr>
<tr>
<td>( )</td>
<td>Related Data</td>
<td>: F3</td>
<td>( )</td>
<td>Prev/Next Field</td>
<td>: Tab/Sh-Tb</td>
</tr>
<tr>
<td>( )</td>
<td>Spec Func 1</td>
<td>: Shift-F5</td>
<td>( )</td>
<td>Spec Func 2</td>
<td>: Ctrl-F5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>( )</th>
<th>Home/End</th>
<th>: Home/End</th>
<th>( )</th>
<th>Clear Field</th>
<th>: F8</th>
</tr>
</thead>
<tbody>
<tr>
<td>( )</td>
<td>Clear Form</td>
<td>: Shift-F8</td>
<td>( )</td>
<td>Clear Record</td>
<td>: Shift-F8</td>
</tr>
<tr>
<td>( )</td>
<td>Exit System</td>
<td>: Ctrl-F4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( )</td>
<td>Count Query</td>
<td>: Ctrl-F12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( )</td>
<td>Uppercase and LOVs?</td>
<td>:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( )</td>
<td>Correct Query Order?</td>
<td>:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Block Title: List of Navagable Junctions

Block Table: JUNCTION_LIST

(1) Insert Rec : Insert : (1) Add record at end :
(1) Mandatory checks OK? : (1) Validation checks OK? :
(1) List of Values OK? : (1) Duplicate Fld: Shift-F6 :
(1) Duplicate Rec: F6 : (1) Duplicate checks OK? :
(1) Optional fields marked? : (1) Correct fields uppercase:

(1) Delete Record: Delete :

TEST PLAN

Testing of the transaction is performed at four levels:

1. Developer testing.
2. Secondary testing.
3. End user testing.
4. Production release & verification.

As each applicable section of this test plan is completed, the designated individual responsible for the section will sign the plan in the appropriate places. Each check off item will be completed.

The status of the transaction will be updated in the data dictionary are the transaction progresses through the development and test steps.

Developer Testing

As each individual transaction is generated, the developer performs tests against the transaction to insure that it meets specifications and works properly. Upon successful completion of this testing, the transaction is made available for secondary testing.

Test status conditions are:

(1) 1 - Transaction under development, untested.
(1) 2 - Transaction added to development directory (addmod).
(1) 3 - Development complete, initial unit testing in progress.
(1) 4 - Unit Test checklist completed.
(1) 5 - Specific test plan added (if needed).
(1) 6 - Any bugs found in Unit test fixed.
(1) 7 - Updated test booklet printed.

Secondary Testing

Secondary testing is performed by a person external to the
development team. Tests are performed using a standardized test checklist. Initial testing is performed to ensure that the transaction meets the functional requirements of the transaction and satisfies the test plan narrative that follows.

1. Secondary testing in progress.
2. Secondary testing complete, problems found. Resolution in progress.
3. Unable to resolve problem at this time.
4. Problem resolution complete.
5. Secondary testing complete, no problems found.

When problems are found:

1. The tester passes the checklist to the project manager for review and action.
2. The project manager assigns the checklist to the developer of the transaction for correction of the problems.
3. The developer corrects the described problems, records the corrective actions taken and the number of hours of corrective effort used, tests the transaction for correct operation, and returns the checklist to the project manager.
4. The project manager returns the checklist to the tester for retesting.

The above sequence of events repeats until the tester signs off the transaction as passing the test requirements.

End User Testing

The transaction is tested by end users for a predetermined time period. This testing is done in the development environment. If no problems are encountered, or all problems are resolved at the end of this time period, the module is ready for Project Manager review.

1. - End User testing in progress.
2. Problem found, resolution in progress.
3. Problem resolution complete.
4. Resolution verified.

Production Status

1. Ready for Project Manager/System Architect review.
2. The Project Manager or System Architect reviews all test results and determines that the transaction has completed testing.
3. The transaction is ready to be placed into production.
Software files moved to production directory.
Transaction added to production menu.
Transaction access given to production roles.
Validation test performed in production.
Production documentation up to date.

The transaction has been put into production

By [Signature] Date Done 3/5/93

Module Test Plan
_____________________________________________________

(✓) Display transaction help. Verify that the narrative adequately describes the purpose and functions of the transaction in end-user terms.

(✓) Transaction help describes:
  (✓) Purpose of the transaction
  (✓) Functions performed by the transaction
  (✓) Where multiple block, what happens in each block.

Block Title: List of Navigable Junctions
Block Table: JUNCTION_LIST
Block Usage: Full Function

Block Help
__________________________________________________________________________

This table is used to determine when and how the related data navigation will operate. Every record in this table signifies a possible navigational path between two related tables. If a record is present in this table, then the appropriate rows are added to the junction table whenever a record is added to the junction table. This table is also used to generate the list of records related to the current record in the form navigated from, and it determines the transaction that will be navigated to.

This table defines the Name, ident column, and ID column of the table that a user may navigate FROM, and the table that the user may navigate TO. It also defines the name of the junction table used to relate these two tables, and the name of the transaction to execute if the user performs this navigation.

If navigation is to be allowed in both directions between two tables that are related, two records must be added to this table.

Block Test Plan
__________________________________________________________________________

(✓) Display block help. Verify that the narrative adequately
Block Test Plan

describes the purpose and functions of the block in end-user terms:

✓ Block help describes:

- Purpose of the block
- Options available in the block
- The relationship of the block to the transaction or to the principal parent block of the transaction
- Navigation to other blocks of the transaction

Where block synchronization is used, ensure that the block data is in sync with the parent block.

✓ Query a single record:

- A single record is retrieved.
- Pressing the F12 key clears the record and permits entering a second query.
- The second query successfully retrieves the desired data.

✓ Query multiple records using wild cards:

- Pressing F12 clears the block and makes the block ready for a query.
- A query composed of a trailing % wildcard retrieves the desired data.
- A query using a prefix % wildcard retrieves the correct data.
- A query using both prefix and suffix % wildcards retrieves the correct data.
- A query using the underscore (_) position wildcard retrieves the correct data.

✓ Verify that the data queries in the block are ordered logically.

✓ Store a series of records using the F6 [duplicate record] key to carry forward field values from the previously stored record.

- Attempting to store the duplicated record without change should result in an error.
- Change key fields and store the record. It should store successfully.

✓ Update a record:

- The change count should increment.
- The date updated should become the current date.
- An error should occur if the operator owner identifier does not match the data owner identifier.
Delete a record from the block:

( ) If the record has dependent records, the delete should fail unless the help text indicates that a cascading delete is permitted.
(✓) Use the clear rcd key (CTRL/F8).
(✓) For a single record block, the block should clear.
(✓) For a multi-record block, the record pointed to by the cursor should clear.
(✓) Use the delete key.
(✓) For a single record block, the block should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should appear in the block.
(✓) For a multiple record block, the entry should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should move up to fill the cleared space.

Field Prompt: Description
Field Usage: Updateable
Field Name: DESC_JUNC

Field Help

Enter a brief description of this junction. This description will appear in the title of the list of possible records to go to.

This data field:
- Is optional and may be left empty.
- May contain any character combination.

Field Test Plan

(✓) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

(✓) Enter data beyond the length of the field:
   (✓) If autoskip is in effect, cursor will skip to the next field.
   (✓) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

(✓) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

(✓) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
(✓) Change the field, committing after each change.
Change the field where a range of valid values exists:

- Value below valid range should display message COM00101 or COM00103 (if no LOV).
- Value above valid range should display message COM00101 or COM00103 (if no LOV).
- Minimum value within the range should be accepted.
- Maximum value within the range should be accepted.
- Random value within the range should be accepted.

Enter query mode and verify that this field is accessible.

Enter query mode and enter a valid value in this field. Only records matching the entered value should be displayed.

Skip the field using the TAB key.

Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

Delete an existing value. The field should be cleared and stored:

- Delete the value using the space bar.
- Delete the value using the clear field key (F8).
Field Prompt: From Table
Field Usage: Updateable
Field Name: FROM_TABLE

Field Help

This column determines the name of the table that this junction may navigate FROM. Enter the full table name.

This data field:
- Is optional and may be left empty.
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

(✓) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.
(✓) Enter data beyond the length of the field:
   (✓) If autoskip is in effect, cursor will skip to the next field.
   (✓) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.
(✓) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.
(✓) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
   (✓) Change the field, committing after each change.
   (✓) Change the field where a range of valid values exists:
       (✓) Value below valid range should display message COM00101 or COM00103 (if no LOV).
       (✓) Value above valid range should display message COM00101 or COM00103 (if no LOV).
       (✓) Minimum value within the range should be accepted.
       (✓) Maximum value within the range should be accepted.
       (✓) Random value within the range should be accepted.
(✓) Enter query mode and verify that this field is accessible.
(✓) Enter query mode and enter a valid value in this field.
   (✓) Only records matching the entered value should be displayed.
(✓) Attempt to delete an existing data field value. An error should result.
   (✓) Use the space bar to attempt to delete the field data.
( ) Use clear field (F8) to attempt to delete the field data.

( ) Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.

( ) Enter a duplicate value. An error should occur.

( ) From LOV, select a value already present in the database. An error should occur.
Field Prompt: From ID Col
Field Usage: Updateable
Field Name: FROM_ID_COL

Field Help

This field identifies the name of the ID column to navigate from.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

( ) Verify that the field accepts character or numeric data within
  the limits imposed by validation criteria.

(✓) Enter data beyond the length of the field:
  (✓) If autoskip is in effect, cursor will skip to the next field.
  (✓) If no autoskip, cursor will remain at the end of the field and
    overlay characters, leaving the last character keyed in the
    last position of the field.

(✓) Display column help. Verify that the narrative adequately
  describes the column's purpose and functions in end-user terms.

(✓) Change the field in an existing record. Verify that the change
  occurred by displaying the record on the screen before and after
  the changes were made.
  (✓) Change the field, committing after each change.
  (✓) Change the field where a range of valid values exists:
    (✓) Value below valid range should display message COM00101 or
        COM00103 (if no LOV).
    (✓) Value above valid range should display message COM00101 or
        COM00103 (if no LOV).
    (✓) Minimum value within the range should be accepted.
    (✓) Maximum value within the range should be accepted.
    (✓) Random value within the range should be accepted.

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.
    (✓) Only records matching the entered value should be displayed.

(✓) Attempt to delete an existing data field value. An error should
    result.
    (✓) Use the space bar to attempt to delete the field data.
    (✓) Use clear field (F8) to attempt to delete the field data.
Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.
Field Prompt: From Ident Col
Field Usage: Updateable
Field Name: FROM_IDENT_COL

Field Help
This field identifies the IDENT column of the table to navigate from.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
   ( ) Change the field, committing after each change.
   ( ) Change the field where a range of valid values exists:
      ( ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
      ( ) Value above valid range should display message COM00101 or COM00103 (if no LOV).
      ( ) Minimum value within the range should be accepted.
      ( ) Maximum value within the range should be accepted.
      ( ) Random value within the range should be accepted.

( ) Enter query mode and verify that this field is accessible.
   ( ) Enter query mode and enter a valid value in this field.
      ( ) Only records matching the entered value should be displayed.

( ) Attempt to delete an existing data field value. An error should result.
   ( ) Use the space bar to attempt to delete the field data.
   ( ) Use clear field (F8) to attempt to delete the field data.
Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.
Field Prompt: To Table
Field Usage: Updateable
Field Name: TO_TABLE

Field Help
The column determines the table that this junction may navigate
TO. Enter the full table name.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

(✓) Verify that the field accepts character or numberic data within
the limits imposed by validation criteria.

(✓) Enter data beyond the length of the field:
(✓) If autoskip is in effect, cursor will skip to the next field.
(✓) If no autoskip, cursor will remain at the end of the field and
overlay characters, leaving the last character keyed in the
last position of the field.

(✓) Display column help. Verify that the narrative adequately
 describes the column's purpose and functions in end-user terms.

(✓) Change the field in an existing record. Verify that the change
occurred by displaying the record on the screen before and after
the changes were made.
(✓) Change the field, committing after each change.
(✓) Change the field where a range of valid values exists:
(✓) Value below valid range should display message COM00101 or
COM00103 (if no LOV).
(✓) Value above valid range should display message COM00101 or
COM00103 (if no LOV).
(✓) Minimum value within the range should be accepted.
(✓) Maximum value within the range should be accepted.
(✓) Random value within the range should be accepted.

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.
(✓) Only records matching the entered value should be displayed.

(✓) Attempt to delete an existing data field value. An error should
result.
(✓) Use the space bar to attempt to delete the field data.
(✓) Use clear field (F8) to attempt to delete the field data.
 Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.

 Enter a duplicate value. An error should occur.

 From LOV, select a value already present in the database. An error should occur.
Field Prompt: To ID Col
Field Usage: Updateable
Field Name: TO_ID_COL

Field Help

This field identifies the name of the ID column in the table to navigate to.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

✓ Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

✓ Enter data beyond the length of the field:
  □ If autoskip is in effect, cursor will skip to the next field.
  □ If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

✓ Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

✓ Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.

✓ Change the field, committing after each change.

✓ Change the field where a range of valid values exists:
  □ Value below valid range should display message COM00101 or COM00103 (if no LOV).
  □ Value above valid range should display message COM00101 or COM00103 (if no LOV).
  □ Minimum value within the range should be accepted.
  □ Maximum value within the range should be accepted.
  □ Random value within the range should be accepted.

✓ Enter query mode and verify that this field is accessible.

✓ Enter query mode and enter a valid value in this field.
  □ Only records matching the entered value should be displayed.

✓ Attempt to delete an existing data field value. An error should result.
  □ Use the space bar to attempt to delete the field data.
  □ Use clear field (F8) to attempt to delete the field data.
Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.
Field Name: TO_IDENT_COL

Field Help

This field identifies the name of the IDENT column of the table to navigate to.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

(✓) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

(✓) Enter data beyond the length of the field:
   (✓) If autoskip is in effect, cursor will skip to the next field.
   (✓) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

(✓) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

(✓) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
   (✓) Change the field, committing after each change.
   (✓) Change the field where a range of valid values exists:
      (✓) Value below valid range should display message COM00101 or COM00103 (if no LOV).
      (✓) Value above valid range should display message COM00101 or COM00103 (if no LOV).
      (✓) Minimum value within the range should be accepted.
      (✓) Maximum value within the range should be accepted.
      (✓) Random value within the range should be accepted.

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.
   (✓) Only records matching the entered value should be displayed.

(✓) Attempt to delete an existing data field value. An error should result.
   (✓) Use the space bar to attempt to delete the field data.
   (✓) Use clear field (F8) to attempt to delete the field data.
(4) Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.
Field Prompt: Junc Table
Field Usage: Updateable
Field Name: JUNC_TABLE

Field Help
----------------------------------------------------------------------------------------------------------------------------------------
This field contains the name of the junction table that links the FROM_TABLE and TO_TABLE.
----------------------------------------------------------------------------------------------------------------------------------------
This data field:
- Is optional and may be left empty.
- May contain any character combination.
- All input is converted to upper case.

Field Test Plan
----------------------------------------------------------------------------------------------------------------------------------------
( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
( ) If autoskip is in effect, cursor will skip to the next field.
( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
( ) Change the field, committing after each change.
( ) Change the field where a range of valid values exists:
  ( ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
  ( ) Value above valid range should display message COM00101 or COM00103 (if no LOV).
  ( ) Minimum value within the range should be accepted.
  ( ) Maximum value within the range should be accepted.
  ( ) Random value within the range should be accepted.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.

( ) Skip the field using the TAB key.

( ) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null
value.

( ) Delete an existing value. The field should be cleared and stored:

( ) Delete the value using the space bar.
( ) Delete the value using the clear field key (F8).
Field Prompt: Junc From Id Col
Field Usage: Updateable
Field Name: JUNC_FROM_ID_COL

Field Help
-----------------------------------------------------------------------------------------------------------------------------------
This field identifies the name of the column in the junction table that corresponds to the ID column in the table to navigate FROM.
-----------------------------------------------------------------------------------------------------------------------------------
This data field:
- Is optional and may be left empty.
- May contain any character combination.
- All input is converted to upper case.

Field Test Plan
-----------------------------------------------------------------------------------------------------------------------------------
( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
( ) Change the field, committing after each change.
( ) Change the field where a range of valid values exists:
   ( ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
   ( ) Value above valid range should display message COM00101 or COM00103 (if no LOV).
   ( ) Minimum value within the range should be accepted.
   ( ) Maximum value within the range should be accepted.
   ( ) Random value within the range should be accepted.

( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Skip the field using the TAB key.
( ) Enter data into the field, backspace the data out of the field

Field will not allow blank?
and TAB to the next field. The database should contain a null value.

- Delete an existing value: The field should be cleared and stored:
  - Delete the value using the space bar.
  - Delete the value using the clear-field key (F8).
Field Prompt: Junc To Id Col
Field Usage: Updateable
Field Name: JUNC_TO_ID_COL

Field Help

This column identifies the name of the column in the junction table that corresponds to the ID column in the table to navigate TO.

This data field:
- Is optional and may be left empty.
- May contain any character combination.
- All input is converted to upper case.

Field Test Plan

( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.
( ) Enter data beyond the length of the field:
  ( ) If autoskip is in effect, cursor will skip to the next field.
  ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.
( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.
( ) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
( ) Change the field, committing after each change:
  ( ) Change the field where a range of valid values exists:
    ( ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
    ( ) Value above valid range should display message COM00101 or COM00103 (if no LOV).
    ( ) Minimum value within the range should be accepted.
    ( ) Maximum value within the range should be accepted.
    ( ) Random value within the range should be accepted.
( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
  ( ) Only records matching the entered value should be displayed.
( ) Skip the field using the TAB key.
( ) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null
value.

( ) Delete an existing value. The field should be cleared and stored:

( ) Delete the value using the space bar.

( ) Delete the value using the clear field key (F8).
Field Prompt: Transaction
Field Usage: Updateable
Field Name: NAME_TRANSACTION

Field Help
-------------------------------------------------------------
This field contains the name of the transaction that will be used
if the user navigates using the junction defined by this record.
-------------------------------------------------------------
This data field:
- Is optional and may be left empty.
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan
-------------------------------------------------------------
( ) Verify that the field accepts character or numeric data within
the limits imposed by validation criteria.
( ) Enter data beyond the length of the field:
  ( } If autoskip is in effect, cursor will skip to the next field.
  ( } If no autoskip, cursor will remain at the end of the field and
      overlay characters, leaving the last character keyed in the
      last position of the field.
( ) Display column help. Verify that the narrative adequately
    describes the column's purpose and functions in end-user terms.
( ) Change the field in an existing record. Verify that the change
    occurred by displaying the record on the screen before and after
    the changes were made.
( ) Change the field, committing after each change.
( ) Change the field where a range of valid values exists:
    ( ) Value below valid range should display message COM00101 or
        COM00103 (if no LOV).
    ( ) Value above valid range should display message COM00101 or
        COM00103 (if no LOV).
    ( ) Minimum value within the range should be accepted.
    ( ) Maximum value within the range should be accepted.
    ( ) Random value within the range should be accepted.
( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
    ( ) Only records matching the entered value should be displayed.
( ) Skip the field using the TAB key.
( ) Enter data into the field, backspace the data out of the field.
and TAB to the next field. The database should contain a null value.

(1) Delete an existing value: The field should be cleared and stored:
   (a) Delete the value using the space bar.
   (b) Delete the value using the clear field key (F8).

(3) Test LOV:
   (a) Select the first entry in the LOV.
   (b) Select the last entry in the LOV.
   (c) Use the FIND option and select an entry.

Field Prompt:
Field Usage: Queryable Only
Field Name: DESCR_TRANSACTION

Field Help
-----------------------------------------------------
A brief description of the transaction. This field will be used as the transaction name in the menus, and on any reports. The description may be entered in mixed case.
-----------------------------------------------------

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.

Field Test Plan
-----------------------------------------------------
(3) Enter query mode and verify that this field is accessible.
(3) Enter query mode and enter a valid value in this field.
   (Only records matching the entered value should be displayed.
Field Prompt: Call Type
Field Usage: Updateable
Field Name: CALL_TYPE

Field Help

This field contains the call type to be made. Valid values:

C = CALL. The transaction will be 'called' and the control will be returned to the calling form.

N = NEWFORM. The transaction will replace the calling transaction as the current transaction.

Q = QUERY. The transaction will be called in query only mode.

This data field:
- Provides a default value. To accept the default value, press the ENTER key or TAB key.
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.

( ) Change the field, committing after each change.
   ( ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
   ( ) Value above valid range should display message COM00101 or COM00103 (if no LOV).
   ( ) Minimum value within the range should be accepted.
   ( ) Maximum value within the range should be accepted.
   ( ) Random value within the range should be accepted.

29
Enter query mode and verify that this field is accessible.

Enter query mode and enter a valid value in this field. Only records matching the entered value should be displayed.

Attempt to delete an existing data field value. An error should result.

Use the space bar to attempt to delete the field data.

Use clear field (F8) to attempt to delete the field data.

Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.
alpha order should be ascending not descending order.

CORRECTIVE ACTION

3/10/93 - Fixed
**Transaction: GE3410U1 Maintain Junction List**

<table>
<thead>
<tr>
<th>Comment ID</th>
<th>898</th>
<th>Priority</th>
<th>LOW</th>
<th>Date:</th>
<th>10-MAR-93</th>
<th>Class:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>PROBLEM</td>
<td>Assigned To</td>
<td>KEN ATKINS</td>
<td>Entered By</td>
<td>LORRAINE CAMPBELL</td>
<td>System ID</td>
</tr>
</tbody>
</table>

**DESCRIPTION**

Autoskip at end of field does not overlay characters nor tab to next field. Didn't know if this was a real problem, maybe just an observation.

**CORRECTIVE ACTION**

3/10/93 - Field performs as specified. Maybe you do not understand functionality.
Programmer's Bug Report

WHC-SD-WM-TP-169 REV 0

Application: GENERIC  Application Maintenance

Transaction: GE3410U1 Maintain Junction List

Comment ID: 899  Priority: LOW  Date: 26-FEB-93

Status: HANDLED  Date: 10-MAR-93  Class:
Type: PROBLEM
Assigned To: KEN ATKINS
Entered By: LORRAINE CAMPBELL
System ID:
Oracle ROWID: 00000045.0000.000B
Last Error: 0
Last Msg: FRM-40407  Transaction complete -- posted records comm
Table: JUNCTION_LIST
Block: JUNLST
Field: JUNLST.DESC_JUNC

DESCRIPTION

help states field is optional. When trying to leave field blank, get
msg that field must be entered.

CORRECTIVE ACTION

3/10/93 - Fixed help.
Programmer’s Bug Report
WHC-SD-WM-TP-169 REV 0

10-MAR-93: GENERIC Application Maintenance

Transaction: GE341001 Maintain Junction List

---------------------------------------------------------------------
Comment ID: 900    Priority: LOW    Date: 26-FEB-93
---------------------------------------------------------------------
Status: HANDLED    Date: 10-MAR-93    Class:
Type: PROBLEM
Assigned To: KEN ATKINS
Entered By: LORRAINE CAMPBELL
System ID:        Oracle ROWID: 00000045.0000.000B
Last Error: 0
Last Msg: FRM-40202 Field must be entered.
Table: JUNCTION_LIST
Block: JUNLST
Field: JUNLST.FROM_TABLE

DESCRIPTION:
Help states both—text can be left empty AND a blank is not allowed

CORRECTIVE ACTION:
3/10/93 - Help fixed.

OK
10-MAR-93

Programmer's Bug Report
WHC-SD-WM-SP-v 169 REV 0

Application: GENERIC Application Maintenance

Transaction: GE3410U1 Maintain Junction List

<table>
<thead>
<tr>
<th>Comment ID</th>
<th>901</th>
<th>Priority: LOW</th>
<th>Date: 26-FEB-93</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>HANDLED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type</td>
<td>PROBLEM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assigned To</td>
<td>KEN ATKINS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entered By</td>
<td>LORRAINE CAMPBELL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System ID</td>
<td></td>
<td>Oracle ROWID: 00000045.0000.0000B</td>
<td></td>
</tr>
<tr>
<td>Last Error</td>
<td>-0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Last Msg</td>
<td>FRM-40400: Transaction complete -- 1 records posted an</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Table</td>
<td>JUNCTION LIST</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block</td>
<td>JUNLST</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field</td>
<td>JUNLST,FROM_TABLE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DESCRIPTION
---------------------------------------------------------
LOV is not in alpha order. At first it looks like it is, but when
scrolling thru it, I found it was not in order.

CORRECTIVE ACTION
---------------------------------------------------------
3/10/93 - Fixed.

[Signature]
Description:

Field is updateable. Therefore, using the space bar or P8 to clear the field will work. No error results. This error probably is with the book and not the software.

Corrective Action:

3/10/93 - Problem with test booklet. Ignore.
DESCRIPTION

Field is optional. No error msg is given nor is there the ability to tab to next field.

CORRECTIVE ACTION

3/10/93 - Field should have been mandatory. Help has been fixed.
10-MAR-93  
Programmer's Bug Report  
WHC-SD-WM-TP-169 REV 0  
Application: GENERIC  
Application Maintenance  
Transaction: GE3410U1 Maintain Junction List  

<table>
<thead>
<tr>
<th>Comment ID</th>
<th>Priority</th>
<th>Date</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>913</td>
<td>LOW</td>
<td>01-MAR-93</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Status</th>
<th>Type</th>
<th>Assigned To</th>
<th>Entered By</th>
<th>System ID</th>
<th>Oracle ROWID</th>
<th>Last Error</th>
<th>Last Msg</th>
<th>Table</th>
<th>Block</th>
<th>Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>HANDLED</td>
<td>PROBLEM</td>
<td>KEN ATKINS</td>
<td>LORRAINE CAMPBELL</td>
<td></td>
<td></td>
<td>FRM-40202</td>
<td>FRM-40202</td>
<td>JUNCTION LIST</td>
<td>JUNLST</td>
<td>JUNLST.JUNC_TABLE</td>
</tr>
</tbody>
</table>

DESCRIPTION

Error msg received, field is optional but will not commit if blank.

CORRECTIVE ACTION

3/10/93 - Help fixed.
Comment ID: 916  Priority: LOW  Date: 01-MAR-93
Status: HANDLED  Class:
Type: PROBLEM
Assigned To: KEN ATKINS
Entered By: LORRAINE CAMPBELL
System ID: Oracle ROWID: 00000045.0000.000B
LastError: -0
Last Msg: FRM-40400  Transaction complete -- 1 records posted an
Table: JUNCTION LIST
Block: JNLST
Field: JNLST.NAME TRANSACTION

DESCRIPTION:
help states both optional and no blank allowed.

CORRECTIVE ACTION:
3/10/93 - Fixed help.
Application: GENERIC   Application Maintenance

Transaction: GE3410U1 Maintain Junction List

Comment ID: 912     Priority: LOW     Date: 01-MAR-93

Status: HANDLED     Date: 10-MAR-93     Class: PROBLEM

Assigned To: KEN ATKINS
Entered By: LORRAINE CAMPBELL

System ID: FRM-40204     Oracle ROWID: 00000045.0000.000B
Last Error: FRM-40204     Last Error: FRM-40204
Last MsgBox: FRM-40204   Cursor is at beginning of field value.
Table: JUNCTION_LIST
Field: JUNLST.JUNC_TABLE

DESCRIPTION

Field is optional. No error msg is given nor is there the ability to

CORRECTIVE ACTION

3/10/93 - Field should have been mandatory. Help has been fixed.
5/7/93 - Fixed hint text on field.
Programmer's Bug Report

Application: GENERIC Application Maintenance

Transaction: GE3410U1 Maintain Junction List

---

Transaction: GE3410U1 Maintain Junction List

Comment ID : 1072 Priority: LOW Date: 07-MAY-93

Status : HANDLED Date: 07-MAY-93 Class: PROBLEM
Assigned To: KEN ATKINS Entered By: KEN ATKINS
System ID : Oracle ROWID:
Last Error : -0 Last Msg : -0
Table : JUNCTION_LIST Block : JUNLST
Field : JUNLST.JUNC_TO_ID_COL

DESCRIPTION

Cannot leave field blank even though hint says optional

CORRECTIVE ACTION

5/7/93 - Fixed bug
Module Description

This transaction is used to maintain the bulletin message that appears for each transaction when the user first accesses the transaction.

Module Help

This transaction is used to maintain the bulletin text that appears when the user first accesses an application. It will also be used for transaction bulletins if and when that is implemented.

There are three blocks:
1) Application Selection block
2) Transaction selection block.
3) Bulletin

To add a bulletin for a transaction:

1) Press <F12> to enter query mode in the "Application" block.
2) Enter the desired application ID, acronym or name.
3) Press <Shift-F12> to execute the query.
4) Press <PageDown> to move to the "Transactions" block.
5) If this is the not the first time bulletin text is being entered, the transaction "ALL" should be automatically queried in the transaction block. If this is the first time, the transaction
Module Help

----------

field will be empty. In this case enter "ALL" as the transaction name.

6) Press <Enter> or <PageDown> to enter the text of the bulletin.
7) Enter the text of the bulletin.
8) Press <F10> to save the text.
9) Press <F10> to commit the new bulletin text.

UNIT TEST CHECKLIST

<table>
<thead>
<tr>
<th>Function Key</th>
<th>Function Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show Version</td>
<td>Shift-F10</td>
</tr>
<tr>
<td>Comment/Bug</td>
<td>Shift-F3</td>
</tr>
<tr>
<td>Fast Access</td>
<td>F5</td>
</tr>
<tr>
<td>Back</td>
<td>F4 or Esc</td>
</tr>
<tr>
<td>Main Menu</td>
<td>Shift-F4</td>
</tr>
<tr>
<td>Key Template</td>
<td>Ctrl-F1</td>
</tr>
<tr>
<td>Context Prnt</td>
<td>F11</td>
</tr>
<tr>
<td>Oracle Prnt</td>
<td>Shift-F11</td>
</tr>
</tbody>
</table>

Block Title: Application
Block Table: APPLICATION

<table>
<thead>
<tr>
<th>Help</th>
<th>F1</th>
<th>Key Help</th>
<th>Shift-F1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Doc</td>
<td>F2</td>
<td>Dis Journal</td>
<td>Shift-F2</td>
</tr>
<tr>
<td>Related Data</td>
<td>F3</td>
<td>Edit Text</td>
<td>F7</td>
</tr>
<tr>
<td>Spec Func 1</td>
<td>Shift-F5</td>
<td>Spec Func 2</td>
<td>Ctrl-F5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Home/End</th>
<th>Home/End</th>
<th>Prv/Nxt Block</th>
<th>PgDn/PgUp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scrlt Up/Dn</td>
<td>Shift-Up/Dn</td>
<td>Prv/Nxt Field</td>
<td>Tab/Sh-Tb</td>
</tr>
<tr>
<td>Prv/Nxt Rec</td>
<td>Up/Down</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Commit Form</td>
<td>F10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clear Field</th>
<th>F8</th>
<th>Clear Record</th>
<th>Shift-F8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear Form</td>
<td>Shift-F8</td>
<td>Exit System</td>
<td>Ctrl-F4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Enter Query</th>
<th>F12</th>
<th>Count Query</th>
<th>Ctrl-F12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct Query</td>
<td>F12</td>
<td>Uppercase and</td>
<td>LOVs?</td>
</tr>
<tr>
<td>Correct Query</td>
<td>F12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Order?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

499
As each applicable section of this test plan is completed, the designated individual responsible for the section will sign the plan in the appropriate places. Each check off item will be completed. The status of the transaction will be updated in the data dictionary as the transaction progresses through the development and test steps.

Developer Testing

As each individual transaction is generated, the developer performs tests against the transaction to insure that it meets specifications and works properly. Upon successful completion of this testing, the transaction is made available for secondary testing.

Test status conditions are:

1. Developer testing.
2. Secondary testing.
3. End user testing.
4. Production release & verification.
Secondary Testing

Secondary testing is performed by a person external to the development team. Tests are performed using a standardized test checklist. Initial testing is performed to ensure that the transaction meets the functional requirements of the transaction and satisfies the test plan narrative that follows.

1. Transaction under development, untested.
2. Transaction added to menu and security.
3. Transaction moved to development directory (addmod).
4. Development complete, initial unit testing in progress.
5. Help added.
6. Unit Test checklist completed.
7. Specific test plan added (if needed).
8. Any bugs found in Unit test fixed.
9. Updated test booklet printed.
10. Initial unit testing complete.

When problems are found:

1. The tester passes the checklist to the project manager for review and action.
2. The project manager assigns the checklist to the developer of the transaction for correction of the problems.
3. The developer corrects the described problems, records the corrective actions taken and the number of hours of corrective effort used, tests the transaction for correct operation, and returns the checklist to the project manager.
4. The project manager returns the checklist to the tester for retesting.

The above sequence of events repeats until the tester signs off the transaction as passing the test requirements.

End User Testing

The transaction is tested by end users for a predetermined time period. This testing is done in the development environment. If no problems are encountered, or all problems are resolved at the end of this time period, the module is ready for Project Manager review.
End User testing in progress.

Problem found, resolution in progress.

Problem resolution complete.

Resolution verified. Date Complete _____

Tester Date Complete _____

Production Status

Ready for Project Manager/System Architect review.

Resolution verified. Date Complete _____

Problem found, resolution in progress.

Resolution verified. Date Complete _____

Problem resolution complete. Developer Date Complete _____

Resolution verified. Date Complete _____

By Date Done 4/15/43

Module Test Plan

Display transaction help. Verify that the narrative adequately describes the purpose and functions of the transaction in end-user terms.

Transaction help describes:
- Purpose of the transaction
- Functions performed by the transaction
- Where multiple block, what happens in each block.

Block Title: Application
Block Table: APPLICATION
Block Usage: Query Only

Block Help

This table is a list of all of the applications in the current database. It is used to determine which users have access to an application, and to group the transactions into applications. It is also used to display the title of the application in the application startup screen.
Block Test Plan

(1) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

(1) Block help describes:

(1) Purpose of the block
(1) Options available in the block
(1) The relationship of the block to the transaction or to the principal parent block of the transaction
(1) Navigation to other blocks of the transaction

(4) Where block synchronization is used, ensure that the block data is in sync with the parent block.

(1) Query a single record:

(1) A single record is retrieved.
(1) Pressing the F12 key clears the record and permits entering a second query.
(1) The second query successfully retrieves the desired data.

(4) Query multiple records using wild cards:

(4) Pressing F12 clears the block and makes the block ready for a query.
(4) A query composed of a trailing % wildcard retrieves the desired data.
(4) A query using a prefix % wildcard retrieves the correct data.
(4) A query using both prefix and suffix % wildcards retrieves the correct data.
(4) A query using the underscore (_) position wildcard retrieves the correct data.

(4) Verify that the data queries in the block are ordered logically.

Field Prompt: Appl ID
Field Usage: Non Updateable
Field Name: IDENT_APPLICATION

This field is a two character code used to identify the application.

This data field:
- May contain any character combination.
Field Help

- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

Enter query mode and verify that this field is accessible.

Enter query mode and enter a valid value in this field.
- Only records matching the entered value should be displayed.

Enter a duplicate value. An error should occur.

From LOV, select a value already present in the database. An error should occur.

Field Prompt: Acronym
Field Usage: Queryable Only
Field Name: APPLICATION_ACRONYM

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

Enter query mode and verify that this field is accessible.

Enter query mode and enter a valid value in this field.
- Only records matching the entered value should be displayed.
Field Prompt: Application Name
Field Usage: Queryable Only
Field Name: NAME_APPLICATION

Field Help

Enter the 1-40 character name of the application.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.

Field Test Plan

( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.
Block Title: Bulletin
Block Table: BULLETIN
Block Usage: Full Function

Block Help

This table stores bulletins that may be displayed upon entry into an application, or a transaction within an application.

Block Test Plan

( ) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

( ) Block help describes:

( ) Purpose of the block
( ) Options available in the block
( ) The relationship of the block to the transaction or to the principal parent block of the transaction
( ) Navigation to other blocks of the transaction

( ) Where block synchronization is used, ensure that the block data is in sync with the parent block.

( ) Query a single record:

( ) A single record is retrieved.
( ) Pressing the F12 key clears the record and permits entering a second query.
( ) The second query successfully retrieves the desired data.

( ) Query multiple records using wild cards:

( ) Pressing F12 clears the block and makes the block ready for a query.
( ) A query composed of a trailing % wildcard retrieves the desired data.
( ) A query using a prefix % wildcard retrieves the correct data.
( ) A query using both prefix and suffix % wildcards retrieves the correct data.
( ) A query using the underscore (_ ) position wildcard retrieves the correct data.

( ) Verify that the data queries in the block are ordered logically.

( ) Store a series of records using the F6 [duplicate record] key to carry forward field values from the previously stored record.
Attempting to store the duplicated record without change should result in an error.
Change key fields and store the record. It should store successfully.

Update a record:
The change count should increment.
The date updated should become the current date.
An error should occur if the operator owner identifier does not match the data owner identifier.

Delete a record from the block:
If the record has dependent records, the delete should fail unless the help text indicates that a cascading delete is permitted.
Use the clear rcd key (CTRL/F8).
For a single record block, the block should clear.
For a multi-record block, the record pointed to by the cursor should clear.
Use the delete key.
For a single record block, the block should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should appear in the block.
For a multiple record block, the entry should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should move up to fill the cleared space.

Field Prompt: Transaction
Field Usage: Updateable
Field Name: NAME_TRANSACTION

Field Help
A bulletin may be displayed for a transaction. To add an application bulletin, enter 'ALL' as the transaction.
This data field:
- Is optional and may be left empty.
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan
Verify that the field accepts character or numeric data within the limits imposed by validation criteria.
Enter data beyond the length of the field:
If autoskip is in effect, cursor will skip to the next field.
Field Test Plan

- If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

- Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

- Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.

- Change the field, committing after each change.

- Change the field where a range of valid values exists:
  - Value below valid range should display message COM00101 or COM00103 (if no LOV).
  - Value above valid range should display message COM00101 or COM00103 (if no LOV).
  - Minimum value within the range should be accepted.
  - Maximum value within the range should be accepted.
  - Random value within the range should be accepted.

- Enter query mode and verify that this field is accessible.

- Enter query mode and enter a valid value in this field.

- Only records matching the entered value should be displayed.

- Skip the field using the TAB key.

- Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

- Delete an existing value. The field should be cleared and stored:
  - Delete the value using the space bar.
  - Delete the value using the clear field key (F8).

- Test LOV:
  - Select the first entry in the LOV.
  - Select the last entry in the LOV.
  - Use the FIND option and select an entry.

- Enter a duplicate value. An error should occur.

- From LOV, select a value already present in the database. An error should occur.
Application: GENERIC Application Maintenance
Transaction: GE3510U1 Maintain Bulletins

Comment ID: 865 Priority: LOW Date: 11-FEB-93

Status: HANDLED Date: 10-MAR-93 Class:
Type: PROBLEM
Assigned To: KEN ATKINS
Entered By: LARRY TOWNER
System ID: 4138 Oracle ROWID: 00000003.0000.000D.
Last Error: -0
Last Msg: FRM-40400 Transaction complete: -- 1 records posted
Table: BULLETIN
Block: BULLET
Field: BULLET.NAME TRANSACTION

DESCRIPTION

The text function for bulletins is screwy. When you key in the text, it rolls outward beyond the screen as a line is keyed. Then when you press F10, it formats the text, not necessarily the way you would like it. Why can't that text capability operate in the same manner as this text I am typing now?

CORRECTIVE ACTION

This problem has been fixed.
Transaction: GE3510U1 Maintain Bulletins

Comment ID: 918 Priority: LOW Date: 03-MAR-93

Status: HANDLED Date: 10-MAR-93 Class:

Type: PROBLEM

Assigned To: KEN ATKINS

Entered By: LORRAINE CAMPBELL

System ID: Oracle ROWID: -0

Record 3: FRM-40400. Transaction complete; 1 records posted an

Table: BULLETIN

Block: BULLET

Field: BULLET.NAME TRANSACTION

DESCRIPTION

Help states both that field may be left blank and that a blank is not
allowed

CORRECTIVE ACTION

3/10/93 - Help has been fixed.

510.
Programmer's Bug Report

WHC-SD-WM-TP-169 REV 0

10-MAR-93

Application: GENERIC  Application Maintenance

Comment ID:  919  Priority: LOW  Date: 03-MAR-93

Status:  HANDLED  Date: 10-MAR-93  Class:  

Type:  PROBLEM  

Assigned To:  KEN ATKINS  

Entered By:  LORRAINE CAMPBELL  

System ID:  8277  Oracle ROWID: 00000003.0005.000D  

Last Error:  -0  

Last Msg:  FRM-40400  Transaction complete -- 1 records posted an  

Table:  BULLETIN  

Block:  BULLET  

Field:  BULLET.NAME.TRANSACTION  

DESCRIPTION

field gives error that field must be entered. Booklet info leads one  
to think that a blank is ok  

CORRECTIVE ACTION

3/10/93 - Test booklet incorrect. Blank is NOT allowed.
Programmer's Bug Report

WHC-SD-WM-TP-169 REV 0

Application: GENERIC  Application Maintenance

Transaction: GE3510U1 Maintain Bulletins

Comment: ID: 920 Priority: LOW Date: 03-MAR-93

Status: HANDLED Date: 10-MAR-93 Class: PROBLEM

Assigned To: KEN ATKINS
Entered By: LORRAINE CAMPBELL
System ID: 8277 Oracle ROWID: 00000003.0005.000D
Last Error: 0
Last Msg.: FRM-40350 Query caused no records to be retrieved.

Table: BULLETIN Block: BULLET FIELD: BULLET.NAME TRANSACTION

DESCRIPTION

BULLETIN block would not let me enter a bug. Bulletin block has no help available. Query does not work either. You cannot press page up to go to prev block. F4 or F10 must be pressed first.

CORRECTIVE ACTION

3/10/93 - The bulletin block is in EDIT MODE and none of these things will work in EDIT MODE. Modified transaction help to clarify this.
LEMIS Module Test Checklist Report

Name: MAINTAIN TRANSFER SETUP
Short Name: GE3710U1
Purpose: To maintain the transfer setup information
Initial Test Date: 4/14/83
Verification Date: 4/22/83

Module Description

This transaction is used to maintain information needed for the generic PC transfer facility. This facility is used to move files between the PC and the host.

Module Help

This transaction is used to maintain information needed to use the generic file transfer facility.

To add a new transfer setup:

1) Query the application the setup will be used for in the 'Application' block of this transaction.
2) Press <PageDown> to move to the 'Transfer Setup' block.
3) Use the arrow keys or press <Insert> to open a new record.
4) Enter the 'Transfer ID'. This is an 8 character identifier that is used to access this transfer setup. It needs to be the same as the 'Transaction ID' that is used in the menu setup for this transfer (see step 15 below)
5) Enter a brief description of this transfer. It should include the direction of the transfer (ie upload or download), and the purpose of the transfer.
Example: Upload laboratory files from PC to LEMIS
Module Help

6) Enter the direction of this transfer. List of values is available.
7) Enter the default source filename. Wildcards may be included.
8) Enter Y or N in the source update flag. If set to Y the user will be allowed to override the default source filename.
9) Enter the default target directory. This will be the directory on the destination system that the files will be placed in.
10) Enter Y or N in the target update flag. If set to Y the user will be allowed to override the default target directory.
11) Enter the processing command. This command will be executed when the transfer is complete.
12) Press <F10> to commit the setup record.
13) Press <F7> to enter the transfer instructions. The generic text popup will appear with a text type of INS and allow instructions to be entered for this transfer setup. These instructions will be displayed on the transfer screen for the user. Only 7 lines may be displayed, so keep the instructions brief. See the text popup help for help with this.

The rest of this procedure does not use this transaction. It is listed here for completeness.

14) Exit this transaction and navigate to the transaction maintenance screen.
15) Create a transaction for this transfer.
   - This transaction needs to be under the same application as specified in step 1) above.
   - The transaction name should be the same as the transfer ID specified in step 4 above.
   - The transaction type needs to be TRANSFER.
   - You may want to use the same text in the transaction setup as specified in the transfer description in step 5 above.
16) Add the transaction to the appropriate menu.
17) Give the appropriate roles access to this transaction.

UNIT TEST CHECKLIST

<table>
<thead>
<tr>
<th>Module</th>
<th>Function Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show Version</td>
<td>Shift-F10</td>
</tr>
<tr>
<td>Comment/Bug</td>
<td>Shift-F3</td>
</tr>
<tr>
<td>Fast Access</td>
<td>F5</td>
</tr>
<tr>
<td>Back</td>
<td>F4 or Esc</td>
</tr>
<tr>
<td>Main Menu</td>
<td>Shift-F4</td>
</tr>
<tr>
<td>Key Template</td>
<td>Ctrl-F1</td>
</tr>
<tr>
<td>Context Print</td>
<td>F11</td>
</tr>
<tr>
<td>Query Print</td>
<td>Ctrl-F11</td>
</tr>
<tr>
<td>Oracle Print</td>
<td>Shift-F11</td>
</tr>
</tbody>
</table>

Block Title: Application
Block Table: APPLICATION
( ) Block Title: Application
Block Table: APPLICATION

---

Help : F1 : Key Help : Shift-F1 :
Online Doc : F2 : Dis Journal : Shift-F2 :
Related Data : F3 : Edit Text : F7 :
Spec Func 1 : Shift-F5 : Spec Func 2 : Ctrl-F5 :
---

Home/End : Home/End : Prev/Nxt Block : PgDn/PgUp :
Scroll Up/Dn : Shift-Up/Dn : Prev/Nxt Field : Tab/Sh-Tb :
Prv/Nxt Rec : Up/Down : Commit Form : F10 :
---

Clear Field : F8 : Clear Record : Shift-F8 :
Clear Form : Shift-F8 : Exit System : Ctrl-F4 :
---

Enter Query : F12 : Count Query : Ctrl-F12 :
Correct Query Fields? : Uppercase and LOVs? :
Execute qry : Shift-F12 : Correct Query Order? :

---

( ) Block Title: Transfer Setup
Block Table: TRANSFER SETUP

---

Help : F1 : Key Help : Shift-F1 :
Online Doc : F2 : Dis Journal : Shift-F2 :
Related Data : F3 : Edit Text : F7 :
Spec Func 1 : Shift-F5 : Spec Func 2 : Ctrl-F5 :
---

Home/End : Home/End : Prev/Nxt Block : PgDn/PgUp :
Scroll Up/Dn : Shift-Up/Dn : Prev/Nxt Field : Tab/Sh-Tb :
Prv/Nxt Rec : Up/Down : Commit Form : F10 :
---

Clear Field : F8 : Clear Record : Shift-F8 :
Clear Form : Shift-F8 : Exit System : Ctrl-F4 :
---

Enter Query : F12 : Count Query : Ctrl-F12 :
Correct Query Fields? : Uppercase and LOVs? :
Execute qry : Shift-F12 : Correct Query Order? :
---

Insert Rec : Insert : Add record at end :
Mandatory checks OK? : Validation checks OK :
List of Values OK? : Duplicate Fld : Shift-F6 :
Duplicate Rec : F6 : Duplicate checks OK :
Optional fields marked? : Correct fields uppercase :
---

( ) Delete Record : Delete :
---

3) Current 9b Optimal
---

Testing of the transaction is performed at four levels:

---

3515
1. Developer testing.
2. Secondary testing.
3. End user testing.
4. Production release & verification.

As each applicable section of this test plan is completed, the designated individual responsible for the section will sign the plan in the appropriate places. Each check off item will be completed. The status of the transaction will be updated in the data dictionary as the transaction progresses through the development and test steps.

Developer Testing

As each individual transaction is generated, the developer performs tests against the transaction to ensure that it meets specifications and works properly. Upon successful completion of this testing, the transaction is made available for secondary testing.

Test status conditions are:

- Transaction under development, untested.
- Transaction added to menu and security.
- Transaction moved to development directory (addmod).
- Development complete, initial unit testing in progress.
- Help added
- Unit Test checklist completed.
- Specific test plan added (if needed).
- Any bugs found in Unit test fixed.
- Updated test booket printed.
- Initial unit testing complete.

Secondary Testing

Secondary testing is performed by a person external to the development team. Tests are performed using a standardized test checklist. Initial testing is performed to ensure that the transaction meets the functional requirements of the transaction and satisfies the test plan narrative that follows.

- Secondary testing in progress.
- Secondary testing complete, problems found. Resolution in progress.
- Unable to resolve problem at this time.
- Problem resolution complete.
- Secondary testing complete, no problems found.

When problems are found:

1. The tester passes the checklist to the project manager for review and action.
2. The project manager assigns the checklist to the developer of the transaction for correction of the problems.

3. The developer corrects the described problems, records the corrective actions taken and the number of hours of corrective effort used, tests the transaction for correct operation, and returns the checklist to the project manager.

4. The project manager returns the checklist to the tester for retesting.

The above sequence of events repeats until the tester signs off the transaction as passing the test requirements.

End User Testing

The transaction is tested by end users for a predetermined time period. This testing is done in the development environment. If no problems are encountered, or all problems are resolved at the end of this time period, the module is ready for Project Manager review.

\[
\begin{align*}
(9) & \quad \text{End User testing in progress.} \\
(10) & \quad \text{Problem found, resolution in progress.} \\
(11) & \quad \text{Problem resolution complete.} \\
(12) & \quad \text{Resolution verified.}
\end{align*}
\]

Developer \underline{\text{Date Complete}} \\
Tester \underline{\text{Date Complete}}

Production Status

\[
\begin{align*}
(13) & \quad \text{Ready for Project Manager/System Architect review.} \\
(\checkmark) & \quad \text{The Project Manager or System Architect reviews all test results and determines that the transaction has completed testing.} \\
\text{Architect/Manager} & \underline{\text{Date Complete}} \quad 4/23/93
\end{align*}
\]

\[
\begin{align*}
(14) & \quad \text{The transaction is ready to be placed into production.} \\
(\checkmark) & \quad \text{Software files moved to production directory.} \\
(\checkmark) & \quad \text{Transaction added to production menu.} \\
(\checkmark) & \quad \text{Validation test performed in production.} \\
(\checkmark) & \quad \text{Production documentation up to date.}
\end{align*}
\]

\(\checkmark\) 15 - The transaction has been put into production

By \underline{\text{Date Done}} \quad 4/23/93

Module Test Plan

\[
\text{Display transaction help. Verify that the narrative adequately describes the purpose and functions of the transaction in end-user terms.}
\]
Block Title: Application
Block Table: APPLICATION
Block Usage: Query Only

Block Help

This table is a list of all of the applications in the current database. It is used to determine which users have access to an application, and to group the transactions into applications. It is also used to display the title of the application in the application startup screen.

Block Test Plan

(/) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

(/) Block help describes:
   (/) Purpose of the block
   (/) Options available in the block
   (/) The relationship of the block to the transaction or to the principal parent block of the transaction
   (/) Navigation to other blocks of the transaction

(/) Where block synchronization is used, ensure that the block data is in sync with the parent block.

(/) Query a single record:
   (/) A single record is retrieved.
   (/) Pressing the F12 key clears the record and permits entering a second query.
   (/) The second query successfully retrieves the desired data.

(/) Query multiple records using wild cards:
   (/) Pressing F12 clears the block and makes the block ready for a query.
   (/) A query composed of a trailing % wildcard retrieves the desired data.
   (/) A query using a prefix % wildcard retrieves the correct data.
   (/) A query using both prefix and suffix % wildcards retrieves
the correct data.
  (\) A query using the underscore (_) position wildcard retrieves
the correct data.

(\) Verify that the data queries in the block are ordered logically.

Field Prompt: ID
Field Usage: Non Updateable
Field Name: IDENT_APPLICATION

Field Help
This field is a two character code used to identify the application.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan
(\) Enter query mode and verify that this field is accessible.
(\) Enter query mode and enter a valid value in this field.
   (\) Only records matching the entered value should be displayed.
(\) Enter a duplicate value. An error should occur.
(\) From LOV, select a value already present in the database. An
   error should occur.
Field Prompt: Acronym
Field Usage: Queryable Only
Field Name: APPLICATION_ACRONYM

Field Help
---------------------------------------------------------------------
This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan
---------------------------------------------------------------------
(✓) Enter query mode and verify that this field is accessible.
(✓) Enter query mode and enter a valid value in this field.
(✓) Only records matching the entered value should be displayed.

Field Prompt: Name
Field Usage: Non Updateable
Field Name: NAME_APPLICATION

Field Help
---------------------------------------------------------------------
Enter the 1-40 character name of the application.

Field Test Plan
---------------------------------------------------------------------
(✓) Enter query mode and verify that this field is accessible.
(✓) Enter query mode and enter a valid value in this field.
(✓) Only records matching the entered value should be displayed.
Block Test Plan

(✓) Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

(✓) Block help describes:

(✓) Purpose of the block
(✓) Options available in the block
(✓) The relationship of the block to the transaction or to the principal parent block of the transaction
(✓) Navigation to other blocks of the transaction

(✓) Where block synchronization is used, ensure that the block data is in sync with the parent block.

(✓) Query a single record:

(✓) A single record is retrieved.
(✓) Pressing the F12 key clears the record and permits entering a second query.
(✓) The second query successfully retrieves the desired data.

(✓) Query multiple records using wild cards:

(✓) Pressing F12 clears the block and makes the block ready for a query.
(✓) A query composed of a trailing % wildcard retrieves the desired data.
(✓) A query using a prefix % wildcard retrieves the correct data.
(✓) A query using both prefix and suffix % wildcards retrieves the correct data.
(✓) A query using the underscore (_) position wildcard retrieves the correct data.

(✓) Verify that the data queries in the block are ordered logically.

(✓) Store a series of records using the F6 [duplicate record] key to carry forward field values from the previously stored record.

(✓) Attempting to store the duplicated record without change should result in an error.
Change key fields and store the record. It should store successfully.

Update a record:
- The change count should increment.
- The date updated should become the current date.
- An error should occur if the operator owner identifier does not match the data owner identifier.

Delete a record from the block:
- If the record has dependent records, the delete should fail unless the help text indicates that a cascading delete is permitted.
- Use the clear rcd key (CTRL/F8).
- For a single record block, the block should clear.
- For a multi-record block, the record pointed to by the cursor should clear.

Use the delete key.
- For a single record block, the block should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should appear in the block.
- For a multiple record block, the entry should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should move up to fill the cleared space.

Field Prompt: ID
Field Usage: Updateable
Field Name: IDENT_TRANSFER

Field Help
This field is a 12 character unique text used to identify the transfer setup.
This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan
- Verify that the field accepts character or numeric data within the limits imposed by validation criteria.
- Enter data beyond the length of the field:
  - If autoskip is in effect, cursor will skip to the next field.
  - If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.
( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.

( ) Change the field, committing after each change.

( ) Change the field where a range of valid values exists:
  ( ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
  ( ) Value above valid range should display message COM00101 or COM00103 (if no LOV).
  ( ) Minimum value within the range should be accepted.
  ( ) Maximum value within the range should be accepted.
  ( ) Random value within the range should be accepted.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.

( ) Only records matching the entered value should be displayed.

( ) Attempt to delete an existing data field value. An error should result when <F10> or <Enter> are pressed.

( ) Use the space bar to attempt to delete the field data.

( ) Use clear field (F8) to attempt to delete the field data.

( ) Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.

( ) Enter a duplicate value. An error should occur.

( ) From LOV, select a value already present in the database. An error should occur.
Field Prompt: Desc
Field Usage: Updateable
Field Name: DESCRIPTION

Field Help

A brief description of this transfer setup. It should include some
description of where the data is from and what it is to be used for.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.

Field Test Plan

( ) Verify that the field accepts character or numeric data within
the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and
       overlay characters, leaving the last character keyed in the
       last position of the field.

( ) Display column help. Verify that the narrative adequately
    describes the column's purpose and functions in end-user terms.

( ) Change the field in an existing record. Verify that the change
    occurred by displaying the record on the screen before and after
    the changes were made.

( ) Change the field, committing after each change.
    ( ) Value below valid range should display message COM00101 or
        COM00103 (if no LOV).
    ( ) Value above valid range should display message COM00101 or
        COM00103 (if no LOV).
    ( ) Minimum value within the range should be accepted.
    ( ) Maximum value within the range should be accepted.
    ( ) Random value within the range should be accepted.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
    ( ) Only records matching the entered value should be displayed.

( ) Attempt to delete an existing data field value. An error should.
    result when <F10> or <Enter> are pressed.
    ( ) Use the space bar to attempt to delete the field data.
    ( ) Use clear field (F8) to attempt to delete the field data.
Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.
Field Prompt: Dir
Field Usage: Updateable
Field Name: FLAG_DIRECTION

Field Help
Indicates the direction of this transfer:

U = Upload the data from the PC to the server.
D = Download the data from the server to the PC.

This data field:
- Provides a default value. To accept the default value, press the ENTER key or TAB key.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
( ) Change the field, committing after each change.
( ) Change the field where a range of valid values exists:
   ( ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
   ( ) Value above valid range should display message COM00101 or COM00103 (if no LOV).
   ( ) Minimum value within the range should be accepted.
   ( ) Maximum value within the range should be accepted.
   ( ) Random value within the range should be accepted.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.
( ) Accept the default.
Modify each default value with a valid alternative.

Modify each default value with an invalid alternative.

Attempt to delete an existing data field value. An error should result when <F10> or <Enter> are pressed.

Use the space bar to attempt to delete the field data.

Use clear field (F8) to attempt to delete the field data.

Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.

Test LOV:

Select the first entry in the LOV.

Select the last entry in the LOV.

Use the FIND option and select an entry.

982 letters do not appear in "find" command but search works.
Field Prompt: Source
Field Usage: Updateable
Field Name: DEFAULT_SOURCE

Field Help
The default source filename(s) of the transfer. Wildcards may be used to include multiple files.

This data field:
- Is optional and may be left empty.
- May contain any character combination.

Field Test Plan

(✓) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

(✓) Enter data beyond the length of the field:
    (✓) If autoskip is in effect, cursor will skip to the next field.
    (✓) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

(✓) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

(✓) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
(✓) Change the field, committing after each change.
(✓) Change the field where a range of valid values exists:
    (✓) Value below valid range should display message COM00101 or COM00103 (if no LOV).
    (✓) Value above valid range should display message COM00101 or COM00103 (if no LOV).
    (✓) Minimum value within the range should be accepted.
    (✓) Maximum value within the range should be accepted.
    (✓) Random value within the range should be accepted.

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.
(✓) Only records matching the entered value should be displayed.

(✓) Accept the default.

(✓) Modify each default value with a valid alternative.

(✓) Modify each default value with an invalid alternative.
Skip the field using the TAB key.

Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

Delete an existing value. The field should be cleared and stored:

- Delete the value using the space bar.
- Delete the value using the clear field key (F8).
Field Prompt: Upd?
Field Usage: Updateable
Field Name: FLAG_UPD_SOURCE

Field Help
------------------------------------------------------------------------
If set to 'Y', then the user will be allowed to override the default source filename(s).
------------------------------------------------------------------------
This data field:
- Provides a default value. To accept the default value, press ENTER key or TAB key.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan
------------------------------------------------------------------------
( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.
( ) Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.
( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.
( ) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
( ) Change the field, committing after each change.
( ) Change the field where a range of valid values exists:
   ( ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
   ( ) Value above valid range should display message COM00101 or COM00103 (if no LOV).
   ( ) Minimum value within the range should be accepted.
   ( ) Maximum value within the range should be accepted.
   ( ) Random value within the range should be accepted.
( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.
( ) Accept the default.
( ) Modify each default value with a valid alternative.
Modify each default value with an invalid alternative.

Skip the field using the TAB key.

Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

Delete an existing value. The field should be cleared and stored:

- Delete the value using the space bar.
- Delete the value using the clear field key (F8).

Test LOV:
- Select the first entry in the LOV.
- Select the last entry in the LOV.
- Use the FIND option and select an entry.
Field Prompt: Target  
Field Usage: Updateable  
Field Name: DEFAULT_TARGET

Field Help

The default target directory for the files to be transferred.

This data field:
- Is optional and may be left empty.
- May contain any character combination.

Field Test Plan

1. Verify that the field accepts character or numeric data within the limits imposed by validation criteria.
2. Enter data beyond the length of the field:
   - If autoskip is in effect, cursor will skip to the next field.
   - If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.
3. Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.
4. Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
5. Change the field, committing after each change.
6. Change the field where a range of valid values exists:
   - Value below valid range should display message COM00101 or COM00103 (if no LOV).
   - Value above valid range should display message COM00101 or COM00103 (if no LOV).
   - Minimum value within the range should be accepted.
   - Maximum value within the range should be accepted.
   - Random value within the range should be accepted.
7. Enter query mode and verify that this field is accessible.
8. Enter query mode and enter a valid value in this field.
   - Only records matching the entered value should be displayed.
9. Accept the default.
10. Modify each default value with a valid alternative.
11. Modify each default value with an invalid alternative.
(→) Skip the field using the TAB key.

(→) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

(→) Delete an existing value. The field should be cleared and stored:

{ } Delete the value using the space bar.

{ } Delete the value using the clear field key (F8).
Field Prompt: Upd?
Field Usage: Updateable
Field Name: FLAG_UPD_TARGET

Field Help

If set to 'Y' then the user will be allowed to override the default target directory.

Field Test Plan

(✓) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

(✓) Enter data beyond the length of the field:
   (✓) If autoskip is in effect, cursor will skip to the next field.
   (✓) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

(✓) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

(✓) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
   (✓) Change the field, committing after each change.
      (✓) Value below valid range should display message COM00101 or COM00103 (if no LOV).
      (✓) Value above valid range should display message COM00101 or COM00103 (if no LOV).
      (✓) Minimum value within the range should be accepted.
      (✓) Maximum value within the range should be accepted.
      (✓) Random value within the range should be accepted.

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.
      (✓) Only records matching the entered value should be displayed.

(✓) Accept the default.

(✓) Modify each default value with a valid alternative.

(✓) Modify each default value with an invalid alternative.

(✓) Skip the field using the TAB key.

(✓) Enter data into the field, backspace the data out of the field.
and TAB to the next field. The database should contain a null value.

- Delete an existing value. The field should be cleared and stored.
  - Delete the value using the space bar.
  - Delete the value using the clear field key (F8).

Test LOV:
- Select the first entry in the LOV.
- Select the last entry in the LOV.
- Use the FIND option and select an entry.
Field Prompt: Command  
Field Usage: Updateable  
Field Name: PROCESS_COMMAND

Field Help
----------------------------------------------------------
The command to be used to process the files after they have been transferred.
----------------------------------------------------------
This data field:
- Is optional and may be left empty.
- May contain any character combination.

Field Test Plan
----------------------------------------------------------

(✓) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

(✓) Enter data beyond the length of the field:
    (✓) If autoskip is in effect, cursor will skip to the next field.
    (✓) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

(✓) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

(✓) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.

(✓) Change the field, committing after each change.

(✓) Change the field where a range of valid values exists:
    (✓) Value below valid range should display message COM00101 or COM00103 (if no LOV).
    (✓) Value above valid range should display message COM00101 or COM00103 (if no LOV).
    (✓) Minimum value within the range should be accepted.
    (✓) Maximum value within the range should be accepted.
    (✓) Random value within the range should be accepted.

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.

(✓) Skip the field using the TAB key.

(✓) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.
( ) Delete an existing value. The field should be cleared and stored:

( ) Delete the value using the space bar.

( ) Delete the value using the clear field key (F8).
Field Prompt: Options
Field Usage: Updateable
Field Name: COMMAND OPTIONS

Field Help
------------------------------------------------------------------------------------
Options for the file processing command. If options are entered here instead of with the command itself, the user will be allowed to override the options.
------------------------------------------------------------------------------------
This data field:
- Is optional and may be left empty.
- May contain any character combination.

Field Test Plan
---------------------------------------------------
( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.
( ) Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.
( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.
( ) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
( ) Change the field, committing after each change.
( ) Change the field where a range of valid values exists:
   ( ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
   ( ) Value above valid range should display message COM00101 or COM00103 (if no LOV).
   ( ) Minimum value within the range should be accepted.
   ( ) Maximum value within the range should be accepted.
   ( ) Random value within the range should be accepted.
( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.
( ) Skip the field using the TAB key.
( ) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null...
value.

( ) Delete an existing value. The field should be cleared and stored:
( ) Delete the value using the space bar.
( ) Delete the value using the clear field key (F8).
Field Prompt: Skip Proc?
Field Usage: Updateable
Field Name: FLAG_SKIP_PROCESS

Field Help

If set to 'Y' then the user will be allowed to skip any file process command that has been defined.

This data field:
- Provides a default value. To accept the default value, press the ENTER key or TAB key.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
   ( ) Change the field, committing after each change.
   ( ) Change the field where a range of valid values exists:
      ( ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
      ( ) Value above valid range should display message COM00101 or COM00103 (if no LOV).
      ( ) Minimum value within the range should be accepted.
      ( ) Maximum value within the range should be accepted.
      ( ) Random value within the range should be accepted.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Accept the default.

( ) Modify each default value with a valid alternative.
( ) Modify each default value with an invalid alternative.

( ) Skip the field using the TAB key.

( ) Enter data into the field, backspace the data out of the field and TAB to the next field. The database should contain a null value.

( ) Delete an existing value. The field should be cleared and stored:

( ) Delete the value using the space bar.
( ) Delete the value using the clear field key (F8).

( ) Test LOV:
( ) Select the first entry in the LOV.
( ) Select the last entry in the LOV.
( ) Use the FIND option and select an entry.
Programmer's Bug Report

Application: GENERIC  Application Maintenance
Transaction: GE3710U1 Maintain Transfer Setup

-----------------------------------------------

Comment ID: 981  Priority: LOW  Date: 13-APR-93

-----------------------------------------------

Status: HANDLED  Date: 22-APR-93  Class:
Type: PROBLEM
Assigned To: KEN ATKINS
Entered By: LORRAINE CAMPBELL
System ID: 8034  Oracle ROWID: 000001AD.0006.0006
Last Error: 0
Last Msg: FRM-40352  Last row of query retrieved.
Table: APPLICATION
Block: APPL
Field: APPL.IDENT.APPLICATION

DESCRIPTION

-----------------------------------------------

Spelling errors. #2 pagedown is spelled pagedowne
#13 brief is spelled breif

CORRECTIVE ACTION

-----------------------------------------------

4/22/93 Help has been fixed.
Programmer's Bug Report

Application: GENERIC Application Maintenance

Transaction: GE3710U1 Maintain Transfer Setup

Comment ID: 982  Priority: LOW  Date: 14-APR-93

--- Transaction Details ---

Status: ASSIGNED  Date: 22-APR-93  Class: PROBLEM
Assigned To: KEN ATKINS
Entered By: LORRAINE CAMPBELL
System ID: 8442  Oracle ROWID: 00000003.0003.0006
Last Error: 0
Last Msg: FRM-40202 Field must be entered.
Table: TRANSFER_SETUP
Block: TRASET
Field: TRASET.FLAG_DIRECTION

--- Description ---

I don't know if this is really a problem but when using find with the LOV and typing the string to search for, the letters do not appear in the block for find. When executing the command find does work.

--- Corrective Action ---

4/22/93 - This is a SQL*Forms BUG. Does not effect this screen, because users should never use find.
Programmer's Bug Report

Application: GENERIC Application Maintenance

Transaction: GE3710U1 Maintain Transfer Setup

-----------------------------
Comment ID : 983  Priority: LOW  Date: 14-APR-93

Status : ASSIGNED  Date: 22-APR-93  Class: PROBLEM
Assigned To: KEN ATKINS
Entered By : LORRAINE CAMPBELL
System ID : 8442  Oracle ROWID: 00000003.0003.0006

Last Error : 0
Last Msg : FRM-40400  Transaction complete -- 1 records posted an
Table : TRANSFER_SETUP
Block : TRASET
Field : TRASET.FLAG_UPD_SOURCE

DESCRIPTION

Field help states a blank not allowed. Hint text states optional.
field will allow a blank and no error msg.

CORRECTIVE ACTION

4/22/93 - Hint fixed and made mandatory.

OK
Programmer's Bug Report

Application: GENERIC  Application Maintenance

Transaction: GE3710U1 Maintain Transfer Setup

Comment ID :  984  Priority: LOW  Date:  14-APR-93

Status :  ASSIGNED  Date:  22-APR-93  Class:
Type :  PROBLEM
Assigned To :   KEN ATKINS
Entered By :   LORRAINE CAMPBELL
System ID :  8442  Oracle ROWID:  00000003.0003.0006
Last Error :  -0
Last Msg :  FRM-40400  Transaction complete -- 1 records posted an
Table :  TRANSFER_SETUP
Block :  TRASET
Field :  TRASET.FLAG_UPD_TARGET

DESCRIPTION

needs descriptive help like source upd above

CORRECTIVE ACTION

4/22/93 - Hint fixed and made mandatory
LEMIS Module Test Checklist Report

Name: START FILE TRANSFER
Short Name: GE3721Q1
Purpose: To start file transfer
Initial Test Date: 4/4/03
Verification Date: 4/22/03

Module Description
This transaction is used to transfer files between the host and the PC. The user enters the source filename and target directory and then starts the transfer.

Module Help
This transaction is used to transfer files between the PC and the host system.

To start a file transfer:

1) Enter the source filename(s). This may be one specific file, or multiple files (using wildcards). (Example: "a:*.*" will transfer all of the files on the a: disk). For an Upload (sending files from the PC to the host) this will need to be the PC file name(s). For a Download (sending files from the host to the PC) this will need to be the unix filename(s). You will only be able to modify this field if it is appropriate for this type of transfer.

2) Enter the Target Directory. This will be the directory that the files will be moved to on the target system (the PC for downloads and the host for uploads). You will only be able to modify this field if it is appropriate for this type of transfer.

3) Press <F10> to start the transfer.
Module Help

4) You will see: "Press Alt-T to begin transfer" Press Alt-T at this time to continue the transfer.

5) The screen will clear, and you will see the file being transferred.

6) When the transfer is complete, you will see a message stating that the file transfer was OK, or that there was a problem with the file transfer. If there is a problem, check the filename you entered to make sure that it is OK. Also check to see if the directory name is valid.

UNIT TEST CHECKLIST

<table>
<thead>
<tr>
<th>Module Function Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show Version : Shift-F10 :</td>
</tr>
<tr>
<td>Comment/Bug : Shift-F3 :</td>
</tr>
<tr>
<td>Fast Access : F5 :</td>
</tr>
<tr>
<td>Back : F4 or Esc :</td>
</tr>
<tr>
<td>Main Menu : Shift-F4 :</td>
</tr>
<tr>
<td>Key Template : Ctrl-F1 :</td>
</tr>
<tr>
<td>Context Prnt : F11 :</td>
</tr>
<tr>
<td>Query Prnt : Ctrl-F11 :</td>
</tr>
<tr>
<td>Oracle Prnt : Shift-F11 :</td>
</tr>
</tbody>
</table>

UNIT TEST CHECKLIST

Block Title: Transfer Setup
Block Table: TRANSFER_SETUP

Block Title: Transfer Setup
Block Table: TRANSFER_SETUP

TEST PLAN

Testing of the transaction is performed at four levels:

1. Developer testing.
2. Secondary testing.
3. End user testing.
4. Production release & verification.
As each applicable section of this test plan is completed, the designated individual responsible for the section will sign the plan in the appropriate places. Each check off item will be completed. The status of the transaction will be updated in the data dictionary are the transaction progresses through the development and test steps.

Developer Testing

As each individual transaction is generated, the developer performs tests against the transaction to insure that it meets specifications and works properly. Upon successful completion of this testing, the transaction is made available for secondary testing.

Test status conditions are:

- **1** - Transaction under development, untested.
- **2** - Development complete, initial unit testing in progress.
- **3** - Initial unit testing complete.
- **4** - Secondary testing in progress.
- **5** - Secondary testing complete, problems found. Resolution in progress.
- **6** - Unable to resolve problem at this time.
- **7** - Problem resolution complete.
- **8** - Secondary testing complete, no problems found.

Secondary testing is performed by a person external to the development team. Tests are performed using a standardized test checklist. Initial testing is performed to ensure that the transaction meets the functional requirements of the transaction and satisfies the test plan narrative that follows.

When problems are found:

1. The tester passes the checklist to the project manager for review and action.
2. The project manager assigns the checklist to the developer of the transaction for correction of the problems.
3. The developer corrects the described problems, records the corrective actions taken and the number of hours of corrective effort used, tests the transaction for correct
operation, and returns the checklist to the project manager.

4. The project manager returns the checklist to the tester for retesting.

The above sequence of events repeats until the tester signs off the transaction as passing the test requirements.

End User Testing

The transaction is tested by end users for a predetermined time period. This testing is done in the development environment. If no problems are encountered, or all problems are resolved at the end of this time period, the module is ready for Project Manager review.

{ } 9 - End User testing in progress.
{ } 10 - Problem found, resolution in progress.
{ } 11 - Problem resolution complete.
         Developer ________ Date Complete ________
{ } 12 - Resolution verified.
         Tester ________ Date Complete ________

Production Status

( ) 13 - Ready for Project Manager/System Architect review.
( ) The Project Manager or System Architect reviews all test results and determines that the transaction has completed testing.
         Architect/Manager ________ Date Complete 4/23/93

( ) 14 - The transaction is ready to be placed into production.
         Software files moved to production directory.
         Transaction added to production menu.
         Transaction access given to production roles.
         Validation test performed in production.
         Production documentation up to date.

( ) 15 - The transaction has been put into production

By ________ Date Done 4/23/93

Module Test Plan

Display transaction help. Verify that the narrative adequately describes the purpose and functions of the transaction in end-user terms.

Transaction help describes:
1. Purpose of the transaction
2. Functions performed by the transaction
3. Where multiple block, what happens in each block.
Transfer a file from the host to the PC. Verify that the file transferred correctly (compare the content of the files).

Transfer a file from the PC to the host. Verify that the file transferred correctly (compare the content of the files).

Transfer multiple files from the host to the PC. Verify that all of the specified files were transferred.

Transfer multiple files from the PC to the host. Verify that all of the specified files were transferred.

Verify that the processing command is executed prior to downloads.

Verify that the processing command is executed after uploads.

Block Help

This table is used to store information needed to use the generic file transfer facility.

Block Test Plan

Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

- Purpose of the block
- Options available in the block
- The relationship of the block to the transaction or to the principal parent block of the transaction
- Navigation to other blocks of the transaction

Where block synchronization is used, ensure that the block data is in sync with the parent block.

Field Prompt: Source
Field Usage: Undefined
Field Name: DEFAULT_SOURCE

Field Help

The default source filename(s) of the transfer. Wildcards may be used to include multiple files.

This data field:
- Is optional and may be left empty.
- May contain any character combination.

Field Test Plan
Accept the default.

Modify each default value with a valid alternative.

Modify each default value with an invalid alternative.

For Downloads, enter a file specification that does not match any files, and verify that an error message is displayed when the transfer is started (F10)

Verify that this field is not updateable when the "Allow source upd?" flag is set to "N" in the GE3710U1 screen.

Verify that this field IS updateable when the "Allow source upd?" flag is set to "Y" in the GE3710U1 screen.

Field Prompt: Target
Field Usage: Undefined
Field Name: DEFAULT_TARGET

Field Help
The default target directory for the files to be transfered.
- Is optional and may be left empty.
- May contain any character combination.

Field Test Plan

Accept the default.

Modify each default value with a valid alternative.

Modify each default value with an invalid alternative.

For Uploads, enter an invalid directory and verify that an error message is displayed when the transfer is started (F10)

Verify that this field is not updateable when the "Allow target upd?" flag is set to "N" in the GE3710U1 screen.

Verify that this field IS updateable when the "Allow target upd?" flag is set to "Y" in the GE3710U1 screen.
Application: GENERIC Application Maintenance

Transaction: GE3721Q1 Generic File Transfer Screen

Comment ID : 987   Priority: LOW   Date: 14-APR-93

Status : HANDLED   Date: 22-APR-93   Class: KEN ATKINS
Type : PROBLEM
Assigned To: KEN ATKINS
Entered By : KEN ATKINS
System ID : Oracle ROWID:
Last Error : -0
Last Msg : FRM-40811 Shell command had error.
Table : ENTRY
Field : ENTRY.DEFAULT_SOURCE

DESCRIPTION
Invalid file does not error out of transfer script.

CORRECTIVE ACTION
4/22/93 - Fixed problem so that it errors correctly. Added informative error message.
22-APR-93

Programmer's Bug Report

Application: GENERIC Application Maintenance

Transaction: GE3721Q1 Generic File Transfer Screen

Comment ID : 988 Priority: LOW Date: 14-APR-93

Status : HANDLED Date: 22-APR-93 Class:
Type : PROBLEM
Assigned To: KEN ATKINS
Entered By : LORRAINE CAMPBELL
System ID : Oracle ROWID:
Last Error : -0
Last Msg : -0
Table :
Block : ENTRY
Field : ENTRY.DEFAULT_SOURCE

DESCRIPTION

There is no block help available

CORRECTIVE ACTION

4/22/93 - Block help not needed for this transaction.
2.6 GE3810U1 MAINTAIN MESSAGES

LEMIS Module Test Checklist Report

Name: MAINTAIN MESSAGES
Short Name: GE3810U1
Purpose: To maintain message table
Initial Test Date: 3/16/93
Verification Date: 5/19/93

Module Description
------------------
This transaction is used to add, delete and modify application messages and message header records.

Module Help
-----------
This transaction is used to add, delete and modify application messages and message header records. The form consists of two blocks:

1) The message header or message group block this determines the first 6 characters of the message ID and is used to group the messages.

2) The list of messages for each group. The text of the message is entered here, along with an automatically generated sequence number. The message ID consists of the 6 characters from the group followed by the 2 digit sequence number.

To add new message groups:
1) Open an empty record in the "System Message Group" block by using the down arrow key or pressing <Insert>.

2) Enter a three character application identifier. Three characters are used instead of two to maintain consistancy with the ORACLE message format. Use FRM to replace SQL*Forms standard messages. (See section below on how to do this)

3) Enter a Facet number. This should be consistent with any facet numbers used in documenting the application. If this message
Module Help
-----------

is common to all facets in an application use "0".

4) Enter a Group number. This could be the number of the function
that these messages are for. You can use any understandable and
consistent method to group the messages.

5) Press <F10> to save the new message group.

To enter new messages:

1) Press <F12> to query an existing message group. If there is no
message group, use <F4> to cancel the query and the information
for a new group. (See procedure above)

2) Use <PageDown> to move the cursor to the "Individual Message"
block.

3) Use the down arrow key or <Insert> to open an empty record.

4) Enter the desired message text.

5) Enter the severity of the message (Sev). This must be one of:
   "E" (error), "I" (information), or "W" (warning).

6) Press <F10> to commit the record. The sequence number and
message identifier will be generated when you commit your message.
The message identifier consists of the APPL ID, Facet ID, Message
Group ID, and Sequence number concatenated together.

7) Repeat for each new message.

In order to trap SQL*Forms messages you need to:

1) Create an appropriate header record with:
   Appl ID = 'FRM'
   Facet ID = application number (ie '4' for RUNFORMS)
   Message Group = 2nd and 3rd digit of message code

Example: for forms message FRM-40102 Appl ID='FRM', Facet ID= '4',
         Group='01'

2) Enter YOUR text for the message.

3) Enter the last two digits of the message code into the sequence
field. For the above Example: Seq='02' This value will be used
   instead of an automatically generated number.

UNIT TEST CHECKLIST

( ) Module/ Function Key
                        **************
( ) Show Version : Shift-F10:
( ) Comment/Bug : Shift-F3 :  
( ) Fast Access : F5 :  
( ) Back : F4 or Esc : 
( ) Main Menu : Shift-F4 :  
( ) Key Template : Ctrl-F1 :  
( ) Context Prnt : F11 :  
( ) Query Prnt : Ctrl-F11 :  
( ) Oracle Prnt : Shift-F11 :  

555
TEST PLAN

Testing of the transaction is performed at four levels:

1. Developer testing.
2. Secondary testing.
3. End user testing.
4. Production release & verification.

As each applicable section of this test plan is completed, the designated individual responsible for the section will sign the plan in the appropriate places. Each check off item will be completed. The status of the transaction will be updated in the data dictionary as the transaction progresses through the development and test steps.

Developer Testing

As each individual transaction is generated, the developer performs tests against the transaction to insure that it meets specifications and works properly. Upon successful completion of this testing, the transaction is made available for secondary testing.

Test status conditions are:

( ) 1 - Transaction under development, untested.
( ) 2 - Development complete, initial unit testing in progress.
( ) 3 - Initial unit testing complete.
( ) 4 - Secondary testing in progress.
( ) 5 - Secondary testing complete, problems found. Resolution in progress.
( ) 6 - Unable to resolve problem at this time.
( ) 7 - Problem resolution complete.

Secondary Testing

Secondary testing is performed by a person external to the development team. Tests are performed using a standardized test checklist. Initial testing is performed to ensure that the transaction meets the functional requirements of the transaction and satisfies the test plan narrative that follows.

Secondary testing in progress.
Secondary testing complete, problems found. Resolution in progress.
Unable to resolve problem at this time.
Problem resolution complete.
When problems are found:

1. The tester passes the checklist to the project manager for review and action.
2. The project manager assigns the checklist to the developer of the transaction for correction of the problems.
3. The developer corrects the described problems, records the corrective actions taken and the number of hours of corrective effort used, tests the transaction for correct operation, and returns the checklist to the project manager.
4. The project manager returns the checklist to the tester for retesting.

The above sequence of events repeats until the tester signs off the transaction as passing the test requirements.

End User Testing

The transaction is tested by end users for a predetermined time period. This testing is done in the development environment. If no problems are encountered, or all problems are resolved at the end of this time period, the module is ready for Project Manager review.

13 - Ready for Project Manager/System Architect review.
14 - The transaction is ready to be placed into production.

Production Status

Architect/Manager Date Complete 5/8/93

By Date Done 5/8/93
Module Test Plan

Display transaction help. Verify that the narrative adequately describes the purpose and functions of the transaction in end-user terms.

Transaction help describes:
- Purpose of the transaction
- Functions performed by the transaction
- Where multiple blocks, what happens in each block.

Verify that when a new individual message is committed without a sequence number (seq), that one is automatically generated.

Verify that when a new individual message is committed WITH a sequence number entered, that the number remains the same and the "Msg ID" is correctly made using the entered number.

Block Title: System Message Groups
Block Table: MESSAGE_HDR
Block Usage: Full Function

Block Help

This table provides unique header information used to group messages. It includes the application, facet and message group keys.

Block Test Plan

Display block help. Verify that the narrative adequately describes the purpose and functions of the block in end-user terms:

- Purpose of the block
- Options available in the block
- The relationship of the block to the transaction or to the principal parent block of the transaction
- Navigation to other blocks of the transaction

Where block synchronization is used, ensure that the block data is in sync with the parent block.

Query a single record:

- A single record is retrieved.
- Pressing the F12 key clears the record and permits entering a second query.
- The second query successfully retrieves the desired data.
Query multiple records using wild cards:

- Pressing F12 clears the block and makes the block ready for a query.
- A query composed of a trailing % wildcard retrieves the desired data.
- A query using a prefix % wildcard retrieves the correct data.
- A query using both prefix and suffix % wildcards retrieves the correct data.
- A query using the underscore (_) position wildcard retrieves the correct data.

Verify that the data queries in the block are ordered logically.

Store a series of records using the F6 [duplicate record] key to carry forward field values from the previously stored record.

- Attempting to store the duplicated record without change should result in an error.
- Change key fields and store the record. It should store successfully.

Update a record:

- The change count should increment.
- The date updated should become the current date.
- An error should occur if the operator owner identifier does not match the data owner identifier.

Delete a record from the block:

- If the record has dependent records, the delete should fail unless the help text indicates that a cascading delete is permitted.
- Use the clear rcd key (CTRL/F8).
  - For a single record block, the block should clear.
  - For a multi-record block, the record pointed to by the cursor should clear.
- Use the delete key.
  - For a single record block, the block should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should appear in the block.
  - For a multiple record block, the entry should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should move up to fill the cleared space.

Field Prompt: Appl
Field Usage: Non Updateable
Field Name: IDENT_APPLICATION
Field Prompt: Appl
Field Usage: Non Updateable
Field Name: IDENT.APPLICATION

Field Help

Enter a three character application ID. This will be the first three characters of the message ID. Use 'COM' to indicate messages common across applications. Use 'FRM' to trap SQL*Forms messages.

This data field:
- Provides a default value. To accept the default value, press the ENTER key or TAB key.
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Attempt to change data in the field. An error should result.
   ( ) Use the spacebar to attempt to change data.
   ( ) Use the clear field key (F8) to attempt to change data.

( ) Attempt to delete data in the field. An error should result.
   ( ) Use the spacebar to attempt to delete data.
   ( ) Use the clear field key (F8) to attempt to delete data.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Accept the default.

( ) Modify each default value with a valid alternative.

( ) Modify each default value with an invalid alternative.
(4) Attempt to delete an existing data field value. An error should result.
   Use the space bar to attempt to delete the field data.
   Use clear field (F8) to attempt to delete the field data.

(5) Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.

(6) Enter a duplicate value. An error should occur.

(7) From LOV, select a value already present in the database. An error should occur.
Field Prompt:
Field Usage: Non Updateable
Field Name: IDENT_FACET

Field Help

This field contains a one character facet identifier. This identifier should match the facet number of the data facet/subsystem that this message is for. If the message is common across facets use 'C'. To trap SQL*Forms messages (application = 'FRM') enter the first digit of the message code.

This data field:
- Provides a default value. To accept the default value, press the ENTER key or TAB key.
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.
( ) Enter data beyond the length of the field:
    ( ) If autoskip is in effect, cursor will skip to the next field.
    ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.
( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.
( ) Attempt to change data in the field. An error should result.
    ( ) Use the spacebar to attempt to change data.
    ( ) Use the clear field key (F8) to attempt to change data.
( ) Attempt to delete data in the field. An error should result.
    ( ) Use the spacebar to attempt to delete data.
    ( ) Use the clear field key (F8) to attempt to delete data.
( ) Enter query mode and verify that this field is accessible.
( ) Enter query mode and enter a valid value in this field.
    ( ) Only records matching the entered value should be displayed.
( ) Accept the default.
( ) Modify each default value with a valid alternative.
Modify each default value with an invalid alternative.

- Attempt to delete an existing data field value. An error should occur.

- Use the space bar to attempt to delete the field data.

- Use clear field (F8) to attempt to delete the field data.

- Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.

- Enter a duplicate value. An error should occur.

- From LOV, select a value already present in the database. An error should occur.
Field Prompt: Facet
Field Usage: Updateable
Field Name: TITLE_FACET

Field Help

This is a textual description of the facet identifier. It is used in the message report.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

(✓) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

(✓) Enter data beyond the length of the field:
   (✓) If autoskip is in effect, cursor will skip to the next field.
   (✓) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

(✓) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

(✓) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
   (✓) Change the field, committing after each change.
   (✓) Change the field where a range of valid values exists:
      (✓) Value below valid range should display message COM00101 or COM00103 (if no LOV).
      (✓) Value above valid range should display message COM00101 or COM00103 (if no LOV).
      (✓) Minimum value within the range should be accepted.
      (✓) Maximum value within the range should be accepted.
      (✓) Random value within the range should be accepted.

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.
   (✓) Only records matching the entered value should be displayed.

(✓) Attempt to delete an existing data field value. An error should result.
   (✓) Use the space bar to attempt to delete the field data.
   (✓) Use clear field (F8) to attempt to delete the field data.
Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.
Field Prompt:
Field Usage: Non Updateable
Field Name: IDENT_GROUP

Field Help
This is a two digit number used to group messages into logical groups. It could represent functions, or any other grouping that is logical for the messages. When trapping SQL*Forms messages enter the 2nd and 3rd digits of the message code.

This data field:
- Provides a default value. To accept the default value, press the ENTER key or TAB key.
- Must contain a valid value. A blank is not allowed.
- Must contain a numeric value (0-9), a comma (), plus (+), minus (-), or period (.).

Field Test Plan

( ) Attempt to store alphabetic characters in the field. An error should result.
   ( ) Begin the field entry with a space. An error should result.
   ( ) Attempt to enter a longer data value than allowed.
   ( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.
   ( ) Attempt to change data in the field. An error should result.
      ( ) Use the spacebar to attempt to change data.
      ( ) Use the clear field key (F8) to attempt to change data.
   ( ) Attempt to delete data in the field. An error should result.
      ( ) Use the spacebar to attempt to delete data.
      ( ) Use the clear field key (F8) to attempt to delete data.
   ( ) Enter query mode and verify that this field is accessible.
   ( ) Enter query mode and enter a valid value in this field.
      ( ) Only records matching the entered value should be displayed.
   ( ) Attempt to enter a decimal value. An error should occur.
      ( ) Accept the default.
      ( ) Modify each default value with a valid alternative.
(✓) Modify each default value with an invalid alternative.

(✓) Attempt to delete an existing data field value. An error should result.

(✓) Use the space bar to attempt to delete the field data.

(✓) Use clear field (F8) to attempt to delete the field data.

(✓) Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.

(✓) Enter a duplicate value. An error should occur.

(✓) From LOV, select a value already present in the database. An error should occur.
Field Prompt: Group
Field Usage: Updateable
Field Name: TITLE

Field Help

This is a textual description of the group identifier. It will be used in the messages report.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

(✓) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

(✓) Enter data beyond the length of the field:
   - If autoskip is in effect, cursor will skip to the next field.
   - If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

(✓) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

(✓) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
   - Change the field, committing after each change.
   - Change the field where a range of valid values exists:
      - Value below valid range should display message COM00101 or COM00103 (if no LOV).
      - Value above valid range should display message COM00101 or COM00103 (if no LOV).
      - Minimum value within the range should be accepted.
      - Maximum value within the range should be accepted.
      - Random value within the range should be accepted.

(✓) Enter query mode and verify that this field is accessible.

(✓) Enter query mode and enter a valid value in this field.
   - Only records matching the entered value should be displayed.

(✓) Attempt to delete an existing data field value. An error should result.
   - Use the space bar to attempt to delete the field data.
   - Use clear field (F8) to attempt to delete the field data.
Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.
Field Prompt: Val Lev
Field Usage: Updateable
Field Name: LEVEL_DATA_VALID

Field Help
This field is used to determine the release level of this message.
If set to 9, then all applications may view this message, if set
to 0 then only the owning application may view this message.

This data field:
- Provides a default value. To accept the default value, press the
  ENTER key or TAB key.
- Must contain a valid value. A blank is not allowed.
- Must contain a numeric value (0-9), a comma (,), plus (+),
  minus (-), or period (.).

Field Test Plan

1. Attempt to store alphabetic characters in the field. An error should result.
2. Begin the field entry with a space. An error should result.
3. Attempt to enter a longer data value than allowed.
4. Display column help. Verify that the narrative adequately
   describes the column's purpose and functions in end-user terms.
5. Change the field in an existing record. Verify that the change
   occurred by displaying the record on the screen before and after
   the changes were made.
6. Change the field, committing after each change.
7. Change the field where a range of valid values exists:
   ( ) Value below valid range should display message COM00101 or
   COM00103 (if no LOV).
   ( ) Value above valid range should display message COM00101 or
   COM00103 (if no LOV).
   ( ) Minimum value within the range should be accepted.
   ( ) Maximum value within the range should be accepted.
   ( ) Random value within the range should be accepted.
8. Enter query mode and verify that this field is accessible.
9. Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.
10. Attempt to enter a decimal value. An error should occur.
Accept the default.

Modify each default value with a valid alternative.

Modify each default value with an invalid alternative.

Attempt to delete an existing data field value. An error should result.

Use the space bar to attempt to delete the field data.

Use clear field (F8) to attempt to delete the field data.

Select the first entry in the LOV.

Select the last entry in the LOV.

Use the FIND option and select an entry.

Attempt to store an invalid code. An error should result.

Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.
Field Prompt: Val
Field Usage: Updateable
Field Name: LEVEL_DATA_VALID

Field Help
This field is used to determine the release level of this message.
If set to 9, then all applications may view this message, if set to 0 then only the owning application may view this message.

This data field:
- Provides a default value. To accept the default value, press the ENTER key or TAB key.
- Must contain a valid value. A blank is not allowed.
- Must contain a numeric value (0-9), a comma (,), plus (+), minus (-), or period (.).

Field Test Plan

( ) Attempt to store alphabetic characters in the field. An error should result.

( ) Begin the field entry with a space. An error should result.

( ) Attempt to enter a longer data value than allowed.

( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.

( ) Change the field, committing after each change.

( ) Change the field where a range of valid values exists:
  ( ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
  ( ) Value above valid range should display message COM00101 or COM00103 (if no LOV).
  ( ) Minimum value within the range should be accepted.
  ( ) Maximum value within the range should be accepted.
  ( ) Random value within the range should be accepted.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
  ( ) Only records matching the entered value should be displayed.

( ) Attempt to enter a decimal value. An error should occur.
( ) Accept the default.

( ) Modify each default value with a valid alternative.

( ) Modify each default value with an invalid alternative.

( ) Attempt to delete an existing data field value. An error should result.
   ( ) Use the space bar to attempt to delete the field data.
   ( ) Use clear field (F8) to attempt to delete the field data.

( ) Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.

( ) Test LOV:
   ( ) Select the first entry in the LOV.
   ( ) Select the last entry in the LOV.
   ( ) Use the FIND option and select an entry.

( ) Attempt to store an invalid code. An error should result.
Block Title: Individual Message
Block Table: MESSAGEDETAIL
Block Usage: Full Function

Block Help

This table is a list of all of the messages in the system. These
messages are displayed by the MSG_QUERY procedure.

Block Test Plan

( ) Display block help. Verify that the narrative adequately
describes the purpose and functions of the block in end-user
terms:

   ( ) Block help describes:
      ( ) Purpose of the block
      ( ) Options available in the block
      ( ) The relationship of the block to the transaction or to
         the principal parent block of the transaction
      ( ) Navigation to other blocks of the transaction

   ( ) Where block synchronization is used, ensure that the block data
      is in sync with the parent block.

( ) Query a single record:

   ( ) A single record is retrieved.
   ( ) Pressing the F12 key clears the record and permits entering
      a second query.
   ( ) The second query successfully retrieves the desired data.

( ) Query multiple records using wild cards:

   ( ) Pressing F12 clears the block and makes the block ready for
      a query.
   ( ) A query composed of a trailing % wildcard retrieves the
      desired data.
   ( ) A query using a prefix % wildcard retrieves the correct
      data.
   ( ) A query using both prefix and suffix % wildcards retrieves
      the correct data.
   ( ) A query using the underscore (_) position wildcard retrieves
      the correct data.

( ) Verify that the data queries in the block are ordered logically.

( ) Store a series of records using the F6 [duplicate record] key to
    carry forward field values from the previously stored record.
Attempting to store the duplicated record without change should result in an error.
Change key fields and store the record. It should store successfully.

Update a record:
- The change count should increment.
- The date updated should become the current date.
- An error should occur if the operator owner identifier does not match the data owner identifier.

Delete a record from the block:
- If the record has dependent records, the delete should fail unless the help text indicates that a cascading delete is permitted.
- Use the clear rcd key (CTRL/F8).
  - For a single record block, the block should clear.
  - For a multi-record block, the record pointed to by the cursor should clear.
- Use the delete key.
  - For a single record block, the block should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should appear in the block.
  - For a multiple record block, the entry should clear. If multiple occurrences of the block's table have been retrieved, the next record in the set should move up to fill the cleared space.

Field Prompt: Msg ID
Field Usage: Queryable Only
Field Name: IDENT_MESSAGE

Field Help

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

- Enter query mode and verify that this field is accessible.
- Enter query mode and enter a valid value in this field. Only records matching the entered value should be displayed.
- Enter a duplicate value. An error should occur.
- From LOV, select a value already present in the database. An
error should occur.
Field Prompt: Text of message
Field Usage: Updateable
Field Name: TEXT_MESSAGE

Field Help
This is the text of the message.

This data field:
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.

Field Test Plan

( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.

( ) Change the field, committing after each change.

( ) Change the field where a range of valid values exists:
   ( ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
   ( ) Value above valid range should display message COM00101 or COM00103 (if no LOV).
   ( ) Minimum value within the range should be accepted.
   ( ) Maximum value within the range should be accepted.
   ( ) Random value within the range should be accepted.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Attempt to delete an existing data field value. An error should result.
   ( ) Use the space bar to attempt to delete the field data.
   ( ) Use clear field (F8) to attempt to delete the field data.

( ) Enter data into the field, backspace the data out of the field and
attempt to TAB to the next field. An error should occur.
Field Prompt: Sev
Field Usage: Updateable
Field Name: SEVERITY

Field Help

A one character severity code. Used to determine how the message is handled.

This data field:
- Provides a default value. To accept the default value, press the ENTER key or TAB key.
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.
- All input is converted to upper case.

Field Test Plan

( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
  ( ) If autoskip is in effect, cursor will skip to the next field.
  ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

( ) Display column help. Verify that the narrative adequately describes the column’s purpose and functions in end-user terms.

( ) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
  ( ) Change the field, committing after each change.
  ( ) Change the field where a range of valid values exists:
    ( ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
    ( ) Value above valid range should display message COM00101 or COM00103 (if no LOV).
    ( ) Minimum value within the range should be accepted.
    ( ) Maximum value within the range should be accepted.
    ( ) Random value within the range should be accepted.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
  ( ) Only records matching the entered value should be displayed.

( ) Accept the default.
Modify each default value with a valid alternative.

Modify each default value with an invalid alternative.

Attempt to delete an existing data field value. An error should result.

Use the space bar to attempt to delete the field data.

Use clear field (F8) to attempt to delete the field data.

Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.

Test LOV:

Select the first entry in the LOV.

Select the last entry in the LOV.

Use the FIND option and select an entry.
Field Prompt: Seq
Field Usage: Non Updateable
Field Name: MSG_SEQ

Field Help
-------------------------------------------------------------

This is the sequence number for the messages within a group. This sequence will be automatically generated at commit time. The message identifier consists of the message header concatenated with this sequence (IDENT_APPLICATION||IDENT_FACET||IDENT_GROUP||MSG_SEQ) To trap SQL*Forms messages you can enter the last two digits of the message code here, for all other messages leave this blank.

This data field:
- Must contain a valid value. A blank is not allowed.
- Must contain a numeric value (0-9), a comma (,), plus (+), minus (-), or period (.).
- Contents are automatically generated by the system.

Field Test Plan
-------------------------------------------------------------

( ) Attempt to store alphabetic characters in the field. An error should result.
( ) Begin the field entry with a space. An error should result.
( ) Attempt to enter a longer data value than allowed.
( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Attempt to change data in the field. An error should result.
( ) Use the spacebar to attempt to change data.
( ) Use the clear field key (F8) to attempt to change data.

( ) Attempt to delete data in the field. An error should result.
( ) Use the spacebar to attempt to delete data.
( ) Use the clear field key (F8) to attempt to delete data.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
( ) Only records matching the entered value should be displayed.

( ) Attempt to enter a decimal value. An error should occur.

( ) Attempt to delete an existing data field value. An error should result.
( ) Use the spacebar to attempt to delete the field data.
Insert clear field (F8) to attempt to delete the field data.

( ) Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.

( ) Enter a duplicate value. An error should occur.

( ) From LOV, select a value already present in the database. An error should occur.
Field Prompt: Txt?
Field Usage: Updateable
Field Name: FLAG_TEXT

Field Help
------------------------------------------------------------------------
This data field:
- Provides a default value. To accept the default value, press the ENTER key or TAB key.
- May contain any character combination.
- Must contain a valid value. A blank is not allowed.

Field Test Plan
------------------------------------------------------------------------
( ) Verify that the field accepts character or numeric data within the limits imposed by validation criteria.

( ) Enter data beyond the length of the field:
   ( ) If autoskip is in effect, cursor will skip to the next field.
   ( ) If no autoskip, cursor will remain at the end of the field and overlay characters, leaving the last character keyed in the last position of the field.

( ) Display column help. Verify that the narrative adequately describes the column's purpose and functions in end-user terms.

( ) Change the field in an existing record. Verify that the change occurred by displaying the record on the screen before and after the changes were made.
   ( ) Change the field, committing after each change.
   ( ) Change the field where a range of valid values exists:
      ( ) Value below valid range should display message COM00101 or COM00103 (if no LOV).
      ( ) Value above valid range should display message COM00101 or COM00103 (if no LOV).
      ( ) Minimum value within the range should be accepted.
      ( ) Maximum value within the range should be accepted.
      ( ) Random value within the range should be accepted.

( ) Enter query mode and verify that this field is accessible.

( ) Enter query mode and enter a valid value in this field.
   ( ) Only records matching the entered value should be displayed.

( ) Attempt to delete an existing data field value. An error should result.
   ( ) Use the space bar to attempt to delete the field data.
   ( ) Use clear field (F8) to attempt to delete the field data.
( ) Enter data into the field, backspace the data out of the field and attempt to TAB to the next field. An error should occur.

( ) Press the TEXT key (F7). The text popup should be displayed.

( ) With the cursor at the text type, press LOV (F9). Where available, a list of other text types available for the entry will be displayed. Select one text type for testing.

( ) Press the ENTER key to move the cursor to the text block.

( ) Enter two lines of text. The cursor should automatically move to the next line when one line is full.

( ) Press the COMMIT key (F10). Press ENTER in response to prompt until the popup disappears and the primary screen reappears.

( ) The text flag should be set to 'Y'.

( ) Select and update text that already exists.
Programmer's Bug Report

WHC_SD-WM-TP-169 REV 0

Application: GENERIC Application Maintenance

Transaction: GE3810UG Maintain Messages

Comment ID: 926 Priority: LOW Date: 04-MAR-93

Status: HANDLED Date: 10-MAR-93 Class:

Type: PROBLEM Assigned To: KEN ATKINS

Entered By: LORRAINE CAMPBELL

System ID: Oracle ROWID:

Last Error: -0

Last Msg: FRM-50016: Legal characters are 0-9 - + E:

Table: MESSAGE_DETAIL Block: MSGDET

Field: MSGDET.MSG_SEQ

DESCRIPTION

field allowed a space to be entered and a tab to next field. Help
states a blank is not allowed. In the descriptive part of help it
also states to leave the field blank?

CORRECTIVE ACTION

3/10/93 - Blank is allowed in this field; Help fixed.
Programmer's Bug Report

WHC-SD-WM-TP-169 REV 0

Application: GENERIC Application Maintenance

Transaction: GE3810U1 Maintain Messages

Comment ID: 928 Priority: LOW Date: 10-MAR-93

Status: HANDLED Date: 10-MAR-93 Class: OPERATIONAL

Type: COMMENT

Assigned To: KEN ATKINS
Entered By: KEN ATKINS

System ID: Oracle ROWID:

Last Error: -
Last Msg: -
Table:

Field: TITLE_FACET

Description:

No error when attempting to delete an existing value.

Corrective Action:

3/10/93 — Everything seems to work fine. The field will be cleared, but the record will not commit. Problem with wording of test book.
Application: GENERIC Application Maintenance

Transaction: GE3810U1 Maintain Messages

---

Comment ID : 929 Priority: LOW Date: 10-MAR-93
Type : COMMENT
Assigned To : KEN ATKINS
Entered By : KEN ATKINS
System ID : ...
Last Error : ...
Last Msg : ...
Table : ...
Block : ...
Field : IDENT_GROUP

DESCRIPTION

Decimal was allowed in field...

---

...
Transaction: GE3810U1 Maintain Messages

Comment ID : 980   Priority: LOW   Date: 13-APR-93

Status : HANDLED   Date: 07-MAY-93   Class:
Type : PROBLEM
Assigned To : KEN ATKINS
Entered By : LORRAINE CAMPBELL
System ID : Oracle ROWID: 00000202.0007.0006
Last Error : -0
Last Msg : FRM-40100 At first record.
Table : MESSAGE_HDR
Block : MSGHDR
Field : MSGHDR.IDENT_GROUP

DESCRIPTION
Help needs fixed. Take out values of comma, and period. Hint text states that only 0-9 + and - are acceptable.

CORRECTIVE ACTION
5/7/93 - Help has been fixed.