

IHS RPMS Laboratory Package/PCC Link Version 5.2 (BLR)

Technical Manual

December 1997

Indian Health Service Resource and Patient Management System

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About This Manual

The Laboratory Package/PCC Link technical manual has been written for Site Managers, Laboratory Implementation Coordinators, and other IRM staff who are responsible for implementing and maintaining the VA Laboratory Package, Version 5.2. The Information Systems Development staff at the Indian Health Service (IHS) has developed a link between the VA Laboratory Package, Version 5.2, and the Patient Care Component (PCC) of the IHS Resource and Patient Management System (RPMS). This link allows for data entered into the Laboratory Package to pass to the PCC automatically, thereby enriching the information stored in the central repository of the RPMS. This technical manual provides instructions for the setup and maintenance of the Laboratory/PCC Link, as well as detailed information on the passage of data from the Lab package to the PCC for both clinical and billing purposes.

Throughout this manual, sample computer dialogs are included to illustrate the performance of various steps. Within these dialogs, computer-generated text appears in courier type, similar to the type that displays on the computer terminal. User responses appear in bold, block type (see the sample below).

In many instances, the user is required to press the RETURN key for accepting default values and entering data. This key may be labeled on your keyboard as the ENTER key. Within the sample computer dialogs that appear in this manual, the RETURN key will be indicated as: <RETURN> (see the sample below).

Sample Computer Dialog

```
KEYWORD-DRIVEN LOOKUP UTILITY (3.51)

SELLS HOSPITAL/CLINIC

DL ICD-9 Dx Lookup
PL ICD-9 Procedure Lookup
CL CPT Procedure Lookup

Select ICD-9 Auto-Coding System Option: DL ICD-9 Dx Lookup

NARRATIVE: DIABETES MELLITUS

250.00 (DM UNCOMPL/T-II/NIDDM,NS UNCON)
DIABETES MELLITUS WITHOUT MENTION OF COMPLICATION/TYPE II/NON-INSULIN
DEPENDENT/ADULT-ONSET,OR UNSPECIFIED TYPE,NOT STATED AS UNCONTROLLED

OK? Y// <RETURN>
```

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Introduction

The IHS Resource and Patient Management System utilizes a central repository of data that has been entered into the system via the various packages that encompass the system. This repository, the Patient Care Component (PCC), stores data from the many different packages in use at each facility. The passage of data from various packages to the PCC occurs via links and typically occurs automatically in the background. The most recent version of the Laboratory Package (Version 5.1) allowed tests from only one module, CH subscripted tests, to pass from the Lab system to the PCC. As a result, only this data was accessible to PCC users who did not have access to the Laboratory Package. Individual tests only, not panels, passed to the PCC. For example, if results for a CBC panel were entered into the Laboratory package, only the results for the individual tests included in this panel—WBC, RBC, etc.—passed to the PCC. In this instance, providers could not search the database for the CBC panel; they could only search for the individual tests within the panel.

The Laboratory package, Version 5.2, received from the Veterans Administration (VA) has been modified by the Indian Health Service to support the additional functionality of passing data to the PCC. The VA Lab package routines and functionality have not been modified to any great degree, thus keeping all data dictionaries the same and minimizing routines. Where appropriate, IHS modifications necessary for passing data from the Laboratory package to the PCC are addressed through calls to the BLR namespace. By minimizing modifications to the VA package, future Laboratory package releases from the VA will be easily adaptable to utilize the IHS-developed link with the PCC. Each modification of a VA LR namespaced routine has been identified according to the IHS Standards and Conventions guidelines. Whenever possible within the MUMPS code, the VA line that has changed is first copied and prefixed with a semicolon for review purposes.

MAS Issues

The VA Laboratory package, Version 5.2, requires the Medical Administration Service (MAS) Version 5.3. The routines furnished by the VA reference Version 5.0 of MAS; however, IHS is not utilizing either of these releases. To address this issue, all references in the LR 5.2 routines to VADPT* have been modified to call BLRDPT*. Although the VADPT* routines have been renamed to BLRDPT*, the variables within the called routines remain namespaced VA*.

System Requirements

In order to implement the link between the Laboratory package, Version 5.2 and the PCC, a number of new files, patches, and data dictionary changes are required.

During the installation of the Laboratory package, either as a first-time installation or an upgrade, six new files are established, as follows.

IHS Lab Transaction Log file (9009022): This file serves as a holding place for all laboratory data that will potentially be passed to the PCC. The data populating this file may come either from the IHS Laboratory package or via an interface with a commercial laboratory package. A transaction is initiated at the time a laboratory order is placed and its status is subsequently updated to *accessioned*, *resulted*, or *deleted*, depending upon activity initiated from the Laboratory package.

IHS Lab CPT Code file (9009021): This file defines the CPT codes, modifiers, and qualifiers, as applicable to those codes, for individual tests and panels of tests that each facility has defined as billable within their system.

IHS Lab CPT Review Code file (9009021.1): This file defines those codes that the laboratory and billing offices have identified as signals for manual review to ensure correct billing. The entry of one of these codes in the appropriate field of the IHS Lab CPT Review Code file will ensure passage of this code to the PCC. For example, a review code of MI could be identified as a signal to the billing office to manually review a V MICRO entry for additional billing associated with identification of an organism and the performance of an antimicrobial susceptibility panel.

IHS Lab CPT Action Code file (9009021.2): This file contains the action code routine to adjust the CPT codes based on any activities performed by the laboratory. For example, if an automated CBC and a manual differential are performed, the routine identifies the combination of CPT codes 85027 and 85007 and automatically passes the CPT code, 85023, for billing.

BLR Lock file (9009023): This file is used only as a lock to ensure that only one link job can be running at a time.

IHS LAB V Conversion file (9009028.1): This file contains the entries used to set pointers from tests in the PCC V Lab file to the entries in File 60 (Laboratory Test file) supplied in a new installation of the Laboratory package.

BLR Master Control file (9009029): This file contains the fields necessary for implementing the link between the Laboratory package and the PCC. Each site for which the laboratory performs testing must have an entry in this file. Fields must be set for each

site to define whether laboratory data is passed into the transaction log and whether data in the transaction log is passed to the PCC.

PCC Changes

In order to implement the Laboratory/PCC Link, the PCC must have redefined fields for V LAB and new files for V Micro and V Blood Bank for the laboratory data to populate. These files and fields are established with the installation of AUPN Version 93.2, patch 6. *The BLR Master Control file must not be set for Transaction to PCC unless this patch has been installed.* Directions for installation are included in the Laboratory package Version 5.2 Installation Guide.

Health Summary Changes

The Health Summary has been modified to display the laboratory data passed to PCC via the Laboratory/PCC link in a more readable format. Panel as well as component tests are differentiated with dates of tests, results, flags, units, and status. This modification to the Health Summary is included in Version 2.0 of APCH.

Billing

Version 2.0 of the IHS Third Party Billing package contains the routines created to capture the CPT codes and other billing data passed to PCC from the Laboratory package.

Overview of the Laboratory/PCC Link

The primary functionality provided in the BLR namespace is the passing of data from the Laboratory Package into the Patient Care Component (PCC). Both clinical and administrative (billing) data is passed in the routines with this namespace.

The BLR files and routines act as a temporary interface between any legacy Laboratory package and the IHS RPMS PCC. In Laboratory Package Versions 5.1 and lower, data could be passed from the Laboratory package into the PCC whenever a result was verified. This process utilized class III software, referred to as the ALRHOOK package. Only tests with results from the CH subscript module passed to the PCC. ALRHOOK did not address panels or data from the microbiology, blood bank, or pathology modules.

In order to ensure the functionality of the laboratory package and the Laboratory /PCC Link, all locally modified Laboratory menus must include the entry and exit actions defined for the original DHCP LRMENU.

Passing Clinical Data

Most data generated in the Laboratory package Version 5.2 is passed into the IHS Lab Transaction Log file. The BLR component of the Laboratory package allows data to be passed subsequently from the Transaction Log file to the PCC, as described below.

Data from all tests and panels from the CH subscript module (e.g., Chemistry, Hematology, Serology, etc.) is passed to the Transaction Log file. The original transaction is passed to the PCC at the time of the test order and the status is subsequently updated to accessioned and resulted when these events occur. If the lab test is a panel, data from both the panel and its component tests is passed. The passing of this data into the Transaction Log occurs without user intervention. In addition, the Transaction Log file has been designed to allow data from other commercial lab packages to be accepted. Once the data is reviewed and verified, it will pass from the Transaction Log file into the PCC without user intervention, in the same way as data from the RPMS Lab 5.2 package.

An enhancement to the Lab/PCC Link is the ability to pass MI (Microbiology) subscripted test data into the IHS Lab Transaction Log file. Unlike test data from the CH subscript module, Microbiology data is only passed to PCC when the test results have been verified in the laboratory. In addition, the Transaction Log file has been designed to allow data from other commercial lab packages to be accepted. Once the data is reviewed and verified, it will pass into the PCC without user intervention.

Limited BB (Blood Bank) subscripted lab test data is passed into the IHS Lab Transaction Log file. Again, the passage of data into the Transaction Log occurs without user intervention after initial file setup. The Transaction Log file has been designed to allow data from other commercial lab packages to be accepted. Once the data is reviewed and verified, it passes into the PCC without user intervention.

Several sites are running the ALRHOOK interface between PCC and the Laboratory package, Version 5.1. To assure backward compatibility, the BLR interface maintains the same file structure as ALRHOOK. CH subscripted data is stored in the V Lab file. The BLR link uses a V Micro file to hold microbiology data and a V Blood Bank file to hold blood bank data. The installation of AUPN patch 6 adds the new fields for V LAB, V MICRO, and V Blood Bank files, along with the appropriate templates.

Rules for Passing Clinical Data

To determine whether data from the Laboratory package, Version 5.2, is passed to the PCC, the following rules apply:

- 1. An entry must exist in the BLR Master Control file for each institution that passes data into the Transaction Log file. If the BLR Master Control file entry has the IHS LAB LOG TRANSACTION field set to 1 (yes), then data is passed from the Lab package into the Transaction Log file. At this point, data exists only in the Transaction Log file and is not passed to the PCC. If no entry exists in the BLR Master Control file for an institution/division managed by the facility, lab data for that particular institution/division will not pass into the Transaction Log. The lack of an entry for an institution in the BLR Master Control file will result in a bulletin noting that a BLR cross-reference could not be set.
- 2. If the BLR Master Control file has the LAB LOG TO PCC field set to 1 (yes), then data is passed from the Transaction Log file into the appropriate PCC V file under the following conditions:
 - Laboratory Service must be added as a new package to the PCC Master Control file if this is a first-time installation. The PASS DATA TO PCC field must be set to 1 (yes) in order for data to be passed from the Laboratory package to the PCC.
 - An entry must exist in the PCC Master Control file for each institution from which the PCC will be accepting data. If an institution is not entered into the PCC Master Control file, data will not pass to the PCC.
 - If this is an upgrade installation, there may be a series of numerical entries separated by "~" in the PACKAGE FLAG field of the PCC Master Control file. The first number of the entry in this field determines if the institution is an outpatient facility or both an inpatient and an outpatient facility. The number 0 indicates that this is an outpatient facility; the number 1 indicates that this is both an inpatient and outpatient facility. If this is a first-time installation, the entry must be set appropriately for the site. No entry is needed in the field, Don't Display Link Messages.
 - If the VA Patient file has an entry in the WARD LOCATION field, then the patient is considered an inpatient. If the patient is identified as an inpatient by virtue of an entry in this field and the PCC Master Control file indicates that the lab ordering institution is only an outpatient facility, then data is not passed to the PCC.
 - The institution or division of the user who is logged onto the Lab system and the location of the patient for whom laboratory work is being ordered determine whether data will be passed to the PCC. If the INSTITUTION field in the Hospital Location file has no entry, the institution of the user who is logged onto the Lab system is used

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as the default and data is passed to the PCC. If both the user's institution and the institution defined under the hospital location of the patient match, and the above rules regarding the Master Control file apply, the data is passed to the PCC. Note that a laboratorian may be logged onto a computer at a different institution for ordering laboratory tests. If the INSTITUTION field of the ordering location is different from the institution of the logged on user, no data will be transmitted to the PCC. In a multi-divisional environment, a user may be logged into a separate institution and order tests for patients at locations within this institution. Data will be passed into the PCC for the institution where the order occurred. This process enables a single laboratory to act as a referral laboratory for multiple institutions.

Please refer to the Laboratory Installation manual for examples on setting up the BLR Master Control file entries. Note that there are two separate sections of the installation manual, depending on whether your facility was running a previous version of the Laboratory package. Be sure that you are referring to the correct section of the manual when setting up the BLR Master Control entries.

- First Time Installation
- Upgrade from Version 5.1

Rules for Passing Administrative/Billing Data

In order for the PCC to accept CPT data that is passed from the Laboratory package, Version 5.2, the conditions detailed in the previous section (Passing Clinical Data) must be met. In addition, the following rules apply to obtaining CPT data for a lab order.

- 1. An entry must exist in the IHS Lab CPT file for each billable panel or test associated with the lab order. The entry must identify the associated panel or test. One or more IHS Lab CPT file entries may contain the panel or test.
- 2. The first entry matching the test name in the IHS Lab CPT file that identifies the panel or test must be active. In other words, the INACTIVATE FLAG field must **not** equal 1 (yes). The first entry matched must also contain a null value or a date and time less than the lab ordering date in the DATE/TIME ACTIVE field. If both of these conditions are met, the CPT data is passed to the PCC.
- 3. In the event that a panel is ordered, the tests associated with the panel do not receive CPT data. Only the panel entry in the PCC contains CPT data because all tests reside within the panel.
- 4. In the event that an individual test is ordered, that PCC entry will receive CPT data; therefore, individual tests ordered also need to be defined in the IHS Lab CPT file.
- 5. If a panel is added to a given accession through the Lab system option, Add Test to Given Accession, the panel will change to individual tests at the time of order if results have not been verified for the original test. As a result of this process, the PCC will recognize only the individual tests, not the panel. If a panel is added to an accession after

the results have been verified for the original accession, the panel is added as a complete entity. This is an important issue for billing purposes as in most cases many of the individual tests of a panel are not billable; for example, MCV, urine mucus, and anion gap. This issue should be considered during file setup and staff training.

- 6. When an MI subscripted order is placed, the initial order passes to the IHS Lab Transaction Log file. The PCC is updated at the initial order time. Microbiology data is not updated again in the PCC until the laboratorian completes the microbiology order/accession and assigns a final date. At the final report time, the result data and the CPT data, if available, pass to the PCC. The data is placed in a new V Micro file. At present, PCC Management reports, Q-Man queries, and health summaries do not display data from this file.
- 7. When a blood bank subscripted order is placed, the initial order passes to the IHS Lab Transaction Log file. The PCC is updated at the initial order time. Blood bank data is not updated again in the PCC until the laboratorian completes the order/accession and assigns a final date. At the final report time, the result data and the CPT data, if available, pass to the PCC.
- 8. Facilities utilizing Multi-Facility Integration (MFI) should consult the Laboratory package development team to determine the proper setup of the BLR Master Control file and the PCC Master Control file.

If the Laboratory package, Version 5.2, was a first-time installation at your facility, the data in Appendix A, Table of 1997 IHS Lab CPT Codes, was entered into the IHS Lab CPT file at the time of installation. This data should be reviewed and edited to match the tests and methodologies used at each site. Sites that are upgrading from Version 5.1 to 5.2 will not have any data in the file so will need to manually populate the file.

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Setup and Management of the Laboratory/PCC Link

This section of the manual provides instructions on using the Main Menu Utilities available in the BLR system for setting up and managing the Laboratory/PCC Link. These utilities include functions to update site parameters for the system; edit the CPT, Action, and Review Code files; and inquire about a specific transaction in the Transaction Log file. Instructions are also provided here for procedures that are required upon initial implementation of the link.

NOTE: In order to use the Enter/Edit options of the BLR menu, users must have an "L" entered in the FILEMANAGER ACCESS CODE field of the New Person file (#200).

Security and Menu Assignment

Before implementing and enabling the Lab/PCC link, you will need to assign security keys and menu options to designated Laboratory system users who will be responsible for maintaining and troubleshooting the link. The instructions below detail the steps for doing so and display sample computer dialogs to illustrate the processes.

Assigning Security Keys

You will need to add the BLRZMENU security key to Lab system users to allow them access to the BLR main menu. To assign the key, you can use the Site Manager's EVE menu or use the programmer's prompt and follow the example shown below.

```
Setting up programmer environment
Terminal Type set to: C-VT100
Select OPTION NAME: ALLOCATION OF SECURITY KEYS XUKEYALL
Allocation of Security Keys

Allocate key: BLRZMENU
Another key: <RETURN>
Holder of key: EVANS,F.J.

Another holder: <RETURN>

You've selected the following keys:
BLRZMENU

You've selected the following holders:
EVANS,F.J.

You are allocating keys. Do you wish to proceed? YES// <RETURN>
```

```
BLRZMENU being assigned to:
EVANS,F.J.
```

Assigning the BLR Menu

To allow Lab system users access to the BLR Lab Main Support menu, you will need to assign the BLRMENU option and add it to the LRMENU (or local menu for the Laboratory package) for each person who will be allowed to monitor the Lab/PCC link. An example of the process is shown here.

```
[LBP,AAA]>D ^XUP
Setting up programmer environment
Terminal Type set to: C-VT100
Select OPTION NAME: EVE
                                Systems Manager Menu
          Core Applications ...
          Device Management ...
          FM VA FileMan ...
          Manage Mailman ...
          Menu Management ...
          Programmer Options ...
          Operations Management ...
          Spool Management ...
          System Security ...
          Taskman Management ...
          User Management ...
          Application Utilities ...
          Capacity Management ...
Select Systems Manager Menu Option: MENU Management
          Edit options
          Key Management ...
          Secure Menu Delegation ...
          Restrict Availability of Options
          Option Access By User
          List Options by Parents and Use
          Build Primary Menu Trees
          Fix Option File Pointers
          Help Processor ...
          Display Menus and Options ...
          Out-Of-Order Set Management ...
          Show Users With Selected Primary or Secondary Menu
Select Menu Management Option: EDIT options
Select OPTION to edit: LRMENU
                                        Laboratory DHCP Menu
NAME: LRMENU// <RETURN>
MENU TEXT: Laboratory DHCP Menu Replace
PACKAGE: LAB SERVICE// <RETURN>
OUT OF ORDER MESSAGE: <RETURN>
LOCK: LRLAB// <RETURN>
```

```
REVERSE/NEGATIVE LOCK: <RETURN>
DESCRIPTION:
  1>Main laboratory menu.
EDIT Option: <RETURN>
TYPE: menu// <RETURN>
HEADER: <RETURN>
ENTRY ACTION: D ^LRPARAM// <RETURN>
EXIT ACTION: D ^LRKILL// <RETURN>
Select ITEM: LRSUPERVISOR// <RETURN>
  ITEM: LRSUPERVISOR// <RETURN>
  SYNONYM: 11// <RETURN>
  DISPLAY ORDER: <RETURN>
Select ITEM: ?
 Answer with MENU ITEM, or SYNONYM
 Do you want the entire 11-Entry MENU List? Y (Yes)
Choose from:
   LRMI 10
                  Microbiology menu
   LRBL
           9 Blood bank
  LR IN 2 Accessioning menu
LR OUT 5 Results menu
LR GET 1 Phlebotomy menu
LR DO! 3 Process data in T
                  Process data in lab menu
   LRSUPERVISOR
                   11
                           Supervisor menu
   LRQCM 4
                  Quality control menu
             7 Ward lab menu
6 Information-help menu
   LRWARDM
            6
   LRHELP
   LRAP
           8
                 Anatomic pathology
     You may enter a new MENU, if you wish
     A USER CAN ASSIGN A 'LOCKED' MENU ONLY IF HE HAS THAT LOCK
 Answer with OPTION NAME, or MENU TEXT
 Do you want the entire OPTION List? {f N}
                                         (No)
Select ITEM: BLRMENU IHS Lab Main Support Menu
  Are you adding 'BLRMENU' as a new MENU (the 12TH for this OPTION)? Y
 (Yes)
   MENU SYNONYM: BLR
  SYNONYM: BLR// <RETURN>
```

Using the Utilities

The BLR utilities available are shown on the following menu. Instructions on the use of each of these options and sample computer dialogs are included here. Note that these utilities are divided into two main categories: those for setting up the link and those for monitoring the link and troubleshooting problems.

```
Select OPTION NAME: LRMENU

1    Phlebotomy menu ...
2    Accessioning menu ...
3    Process data in lab menu ...
4    Quality control menu ...
5    Results menu ...
6    Information-help menu ...
7    Ward lab menu ...
```

```
Anatomic pathology ...
  9
         Blood bank ...
  10
         Microbiology menu ...
  11
         Supervisor menu ...
  BLR
         IHS Lab Main Support Menu ...
Select Laboratory DHCP Menu Option: BLR IHS Lab Main Support Menu
         Link Transaction Processor Status
  INO
         Inquire into the IHS LAB Transaction Log
  FLD
         Search Transactions for PCC LINK DISABLE Error
  S
         Search Transaction Log for PCC Link Requeue
  RSN
         Requeue by Sequence Number
  RST
         Requeue Transaction by Sort Template
  CPT
         Enter/edit IHS Lab CPT File
         Enter/edit IHS LAB Review Code File
  RES
  ACT
         Enter/edit IHS LAB CPT Action Code File
  MSTR
         Enter/edit BLR MASTER CONTROL FILE
  FALL Find ALL PCC Link Errors from Lab
```

Options for Setting Up the Lab/PCC Link

MSTR - Enter/Edit the BLR Master Control File

An entry for each institution for which the laboratory performs testing must be established in the BLR Master Control file. For each institution entered into this file, it must be determined if that institution maintains a separate PCC database. If that institution maintains a separate PCC database, there is no entry in the PCC Master Control file for that institution and the fields Lab Log Transaction and Lab Log to PCC in the BLR Master Control file must be set to "No." If data is to be passed into a common PCC database, the institution must be entered into the PCC Master Control file and both fields in the BLR Master Control file must be set to "Yes." The following example shows how to use the MSTR option to enter or edit an entry in the Master Control file. You may need to review the previous sections on passing clinical and administrative data to determine how to set the flags.

```
Select IHS Lab Main Support Menu Option: MSTR Enter/edit BLR MASTER CONTROL FILE

Select BLR MASTER CONTROL SITE: ?
Answer with BLR MASTER CONTROL SITE
Choose from:
SELLS HOSPITAL/CLINIC
SAN XAVIER HEALTH CENTER

You may enter a new BLR MASTER CONTROL, if you wish
Answer with LOCATION NAME
Do you want the entire 4197-Entry LOCATION List? NO

Select BLR MASTER CONTROL SITE: SELLS HOSPITAL/CLINIC 000101 TUCSON SELLS 01
...OK? Yes// <RETURN> (Yes)
```

```
SITE: SELLS HOSPITAL/CLINIC// <RETURN>
LAB LOG TRANSACTION: YES// <RETURN>
LAB LOG TO PCC: YES// N NO
GUI LAB ORDER SEND PAT: N NO
GUI LAB ORDER LAB COLLECT: N NO
GUI LAB ORDER W/C COLLECT: N NO
GUI LAB MULTIPURPOSE ACC: N NO
Select BLR MASTER CONTROL SITE: SAN XAVIER HEALTH CENTER 000111 TUCSON
SELLS 11
     ...OK? Yes// <RETURN> (Yes)
SITE: SAN XAVIER HEALTH CENTER// <RETURN>
LAB LOG TRANSACTION: YES// <RETURN>
LAB LOG TO PCC: YES// <RETURN>
GUI LAB ORDER SEND PAT: NO// <RETURN>
GUI LAB ORDER LAB COLLECT: NO// <RETURN>
GUI LAB ORDER W/C COLLECT: NO// <RETURN>
GUI LAB MULTIPURPOSE ACC: NO// <RETURN>
Select BLR MASTER CONTROL SITE: <RETURN>
```

CPT – Enter/Edit the IHS Lab CPT File

The following example shows the process of entering or editing an entry in the IHS Lab CPT file. This file allows for the passing of billing data to the PCC. If your site will be passing this type of data, you must populate the CPT file. Review the previous section on passing clinical data for further details.

```
Select IHS Lab Main Support Menu Option: CPT Enter/edit IHS Lab CPT
File
Select IHS LAB CPT CODE NAME: CHEM 7
Are you adding 'CHEM 7' as a new IHS LAB CPT CODE (the 1ST)? Y (Yes)
NAME: CHEM 7// <RETURN>
LAB SECTION: CHEMISTRY
CREATE DATE: ??
   Examples of Valid Dates:
    JAN 20 1957 or 20 JAN 57 or 1/20/57 or 012057
   T (for TODAY), T+1 (for TOMORROW), T+2, T+7, etc.
   T-1 (for YESTERDAY), T-3W (for 3 WEEKS AGO), etc.
   If the year is omitted, the computer uses the CURRENT YEAR.
   If only the time is entered, the current date is assumed.
   Follow the date with a time, such as JAN 20@10, T@10AM, 10:30, etc.
   You may enter a time, such as NOON, MIDNIGHT or NOW.
   Seconds may be entered as 10:30:30 or 103030AM.
   Time is REQUIRED in this response.
   Enter the date/time this entry is created.
CREATE DATE: T@1200 (APR 14, 1997@12:00:00)
DATE/TIME ACTIVE: T@1200 (APR 14, 1997@12:00:00)
DATE/TIME INACTIVE: <RETURN>
PANEL/TEST: CHEM
   1 CHEM 11
```

```
2 CHEM 20
   3 CHEM 7
   4 CHEM CONTROL PANEL
CHOOSE 1-4: 3
INACTIVE FLAG: <RETURN>
Select CPT CODE: 80007
                       7 CLINICAL CHEMISTRY TESTS
    AUTOMATED MULTICHANNEL TEST; 7 CLINICAL CHEMISTRY TESTS
    7 CLINICAL CHEMISTRY TESTS
     ...OK? Yes// \mathbf{Y} (Yes)
Are you adding '80007' as a new CPT CODE (the 1ST for this IHS LAB CPT
CODE)? Y (Yes)
 LAB LIST COST: 7.00
 REVIEW CODE: <RETURN>
ACTION CODE: <RETURN>
 Select MODIFIER: 09990
Are you adding '09990' as a new MODIFIER (the 1ST for this CPT CODE)? Y
(Yes)
 Select MODIFIER: <RETURN>
 Select OUALIFIER: <RETURN>
Select CPT CODE: <RETURN>
DESCRIPTION:
 1>CHEM 7 ENTRY 1997 FJE
 2><RETURN>
EDIT Option: <RETURN>
Select IHS LAB CPT CODE NAME: <RETURN>
```

ACT - Enter/Edit the IHS Lab CPT Action Code File

In BLR, Version 5.2, the entries in the CPT Action Code file are not in use by the BLR routines. This file has been designed to adjust the CPT codes based on activities performed by the laboratory. An entry needs to be made in this file before the CPT entry can point to this action. The following example shows how to enter or edit an entry in the IHS Lab CPT Action Code file.

```
Select IHS Lab Main Support Menu Option: ACT Enter/edit IHS LAB CPT Action Code File

Select IHS LAB CPT ACTION CODE NAME: A99
Are you adding 'A99' as a new IHS LAB CPT ACTION CODE (the 1ST)? Y(Yes)
NAME: A99// <RETURN>
LAB SUBSCRIPT: CH CHEMISTRY, HEME, SER, ETC
RUN ROUTINE: BLRTEST
DESCRIPTION: <RETURN>
1>This routine modifies the CPT to add $1.50 for each additional test
2>for the Chem 22 panel.
3><RETURN>
EDIT Option: <RETURN>
Select IHS LAB CPT ACTION CODE NAME: <RETURN>
```

RES - Enter/Edit the IHS Lab CPT Review Code File

The entries in the Review Code file are not in use by BLR, Version 5.2. This file is designed to notify the billing office of a need for a specific kind of review. This file also contains the run routine that is invoked to modify the resulting CPT entry. Before the CPT entry can point to a result, an entry needs to be made in this file. The following example illustrates making an entry in the IHS Lab CPT Review Code file.

```
Select IHS Lab Main Support Menu Option: RES Enter/edit IHS LAB CPT
Review Code File

Select IHS LAB CPT REVIEW CODE NAME: R99
Are you adding 'R99' as a new IHS LAB CPT REVIEW CODE (the 1ST)?Y (Yes)
NAME: R99// <RETURN>
LAB SUBSCRIPT: CH CHEMISTRY, HEME, SER, ETC
RUN ROUTINE: BLRTEST
DESCRIPTION:

1>This review code checks to see if the Micro culture has a positive culture.

2>If positive, the code is changed based on the number of pos organisms.

3><RETURN>
EDIT Option: <RETURN>

Select IHS LAB CPT REVIEW CODE NAME: <RETURN>
```

Options for Monitoring and Managing the Link

INQ - Inquiring into the IHS/Lab Transaction Log

To review an entry in the Transaction Log using this menu option, you can enter the internal sequence number, as shown in the example below, or you can choose an entry by typing the accession number of the test in question; for example, CH 0411 8.

```
Select IHS Lab Main Support Menu Option: INQ Inquire into the IHS LAB Transaction Log

Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER: 244
...OK? Yes// <RETURN> (Yes)

DEVICE: RIGHT MARGIN: 80// <RETURN>
```

When finished, the following printout displays. A detailed description of each of the fields is contained in Appendix B.

IHS LAB TRANSACTION LOG LIST

SEQUENCE NUMBER: 244

LRFILE: 2

LRDFN: 11288

PATIENT POINTER VALUE: 41149

PANEL/TEST POINTER: CHEM 7

DUZ(2): 4587

STATUS FLAG: ACCESSIONED

ASSOCIATED V FILE: V LAB

PCC ERROR FLAG:

CLINIC STOP CODE POINTER: FAMILY PRACTICE

ORDER DATE: APR 11, 1997@16:18:24

ORDER NUMBER: 76693

ORDERING PROVIDER POINTER: NEUFELD, BRENDA G

ORDERING PROVIDER NAME: NEUFELD, BRENDA G

ORDERING LOCATION POINTER: SAN XAVIER CLINIC

ORDERING LOCATION NAME: SXC

COLLECTION DATE/TIME: APR 11, 1997@16:18:24

ACCESSION NUMBER: CH 0411 8

SITE/SPECIMEN POINTER: SERUM

VERIFIER POINTER: WARES, LORI

VERIFIER NAME: WARES, LORI

LS - Link Transaction Processor Status

This option allows the user to determine whether the processor that passes data from the Transaction Log to PCC is currently running and whether there are any delays in the transmission of data.

Processor Status	SEP 04, 1997@10:09:25		
Current	ly processing day SEP	04, 1997	
Entr	IHS Lab Tr ry Position in Queue	ansaction Sequence Number	
Last Entry Assigned	541	164,310	
Last Entry Processed	541	164,310	
Press Enter to continue: <return></return>			

The Entry Position in the Queue is a number that begins with 1 at the beginning of each day. The system automatically assigns the entry numbers and as long as the system is keeping up, the last entry processed matches the last entry assigned. The Currently Processing Day ____ should match the current date.

The IHS Lab Transaction Sequence Number is the number assigned by the system to each test or panel ordered. Each transaction's status flag is updated to accessioned, resulted, or deleted as the test or panel is processed through the lab. The transaction sequence number does not change once

assigned. This number corresponds to the total number of tests and panels ordered since the BLR Master Control file field, LAB LOG TRANSACTION, was set to "Yes" during setup.

You may see a message "Link is not running!" This could mean one of two things:

- 1. All current transactions have been processed and nobody has accessed any of the Lab system options for ten minutes so the processor has shut down. The processor will restart as soon as any of the Lab menu options are accessed.
- 2. The processor has shut down because of some kind of a "fatal error." You will usually see a significant discrepancy between the Last Entry Assigned and the Last Entry Processed. You may also note that the Currently Processing Day____ entry is not the current date. You will probably also have had some kind of a warning via the generation of errors in the error trap and/or VA alerts. Correcting this problem will be addressed in the Troubleshooting section of this manual.

FLD – Search Transaction Log for PCC Link DISABLE Error

During setup or troubleshooting problems with the Laboratory package or PCC, the Lab/PCC link may be disabled by setting the LAB LOG TO PCC field to "No" in the BLR Master Control file. During the time the link has been disabled, laboratory data will have accumulated in the IHS Lab Transaction Log file. This option allows for the identification of these transactions and the ability to refile them.

```
Select IHS Lab Main Support Menu Option: FLD Search Transactions for PCC LINK DISABLE error

START WITH SEQUENCE NUMBER: 1// 75000

GO TO SEQUENCE NUMBER: 198586// 100000

IHS LAB Transaction Sequence Numbers
WITH PCC ERRORS CONTAINING PCC LINK DISABLED

99507 99508 99509

Do you wish to Queue these entries for processing?

Enter Yes or No? N// YES
```

RST - Requeue by Sort Template

If a series of transactions has not been passed to PCC either because the link has been disabled or other problems with the Link Processor have occurred, these transactions may be queued to be transmitted to PCC. A Sort Template of transactions may be identified via the FileMan Search option. Entry of the template name at the prompt, Sort Template: will automatically requeue this series of transactions. In the following example, all transactions that failed immediate transmission to the PCC because of an invalid entry in the Provider file (Field 1104 of File 9009022 not in Provider file) were compiled into a sort template. The correct entry was made in the Provider file and the transactions were refiled using the option RST, Requeue Transaction by Sort Template.

connical manual	Laboratory V 3.2/F CC Li
VA FileMan 21.0	
Select OPTION: SEARCH FILE ENTRIES	
OUTPUT FROM WHAT FILE: IHS LAB TRANSACTION LO	OG// <return></return>
-A- SEARCH FOR IHS LAB TRANSACTION LOG FIELD-A- CONDITION: CONTAINS -A- CONTAINS: Field 1104 of file 9009022	LD: PCC ERROR FLAG
-B- SEARCH FOR IHS LAB TRANSACTION LOG FIE	LD: <return></return>
IF: A// PCC ERROR FLAG CONTAINS "Field 13	104 of file 9009022"
STORE RESULTS OF SEARCH IN TEMPLATE: DKR SX1 DESCRIPTION: 1> <return></return>	
SORT BY: SEQUENCE NUMBER// <return> START WITH SEQUENCE NUMBER: FIRST// 191000 GO TO SEQUENCE NUMBER: LAST// <return> FIRST PRINT FIELD: .01 SEQUENCE NUMBER THEN PRINT FIELD: PCC ERROR FLAG ************************************</return></return>	
Heading (S/C): IHS LAB TRANSACTION LOG SEARC	CH Replace
START AT PAGE: 1// <return> DEVICE: <return> RIGHT MARGIN: 80// <retu< td=""><td>IPN~</td></retu<></return></return>	IPN~
IHS LAB TRANSACTION LOG SEARCH PAGE 1	OCT 6,1997 15:26
SEQUENCE NUMBER ACCESSION NUMBER PCC ERROR FLAG	
191759 HE 0930 3	87813
Field 1104 of file 9009022 not in Provider	
191760 HE 0930 3 Field 1104 of file 9009022 not in Provider	
191761 HE 0930 3 Field 1104 of file 9009022 not in Provider	87813 file
191762 HE 0930 3 Field 1104 of file 9009022 not in Provider	87813
191763 HE 0930 3	87813
Field 1104 of file 9009022 not in Provider 191764 HE 0930 3	file 87813
Field 1104 of file 9009022 not in Provider 191765 HE 0930 3	file 87813
Field 1104 of file 9009022 not in Provider	
Field 1104 of file 9009022 not in Provider f	ile
191773 HE 0930 3	87813
Field 1104 of file 9009022 not in Provider	file

After correction of the entry in the Provider file, the transactions are refiled using the RST option.

```
Select IHS Lab Main Support Menu Option: RST Requeue Transaction by Sort Template
Select SORT TEMPLATE: ?
Answer with SORT TEMPLATE NAME
Do you want the entire 434-Entry SORT TEMPLATE List? N (No)
Select SORT TEMPLATE: [DKR SX1
```

S - Search Transaction for PCC Link Requeue

This option allows the user to identify any transactions that have not been passed to the PCC and a message (PCC Error Flag) indicating the reason the transaction was not passed. The presence of a number in the IEN of V FILE ENTRY field indicates that an entry was made in the V file in PCC. A description of these messages and the appropriate means of handling disrupted transmissions will be addressed in the Troubleshooting section of this manual.

```
Select IHS Lab Main Support Menu Option: S Search Transaction Log for
PCC Link Requeue
SORT BY: SEQUENCE NUMBER// <RETURN>
START WITH SEQUENCE NUMBER: FIRST// <RETURN>
DEVICE: RIGHT MARGIN: 80// <RETURN>
IHS LAB TRANSACTION LOG LIST
                                              SEP 30,1997 16:21
PAGE 1
                                                                IEN OF V
                                                                   FILE
SEOUENCE NUMBER
                              ACCESSION NUMBER
                                                                   ENTRY
 PCC ERROR FLAG
                               CH 0926 11
 Lab deleted test...PCC entries deleted
                               CH 0926 11
 Lab deleted test...PCC entries already deleted
                               CH 0926 11
 Lab deleted test...PCC entries already deleted
                               CH 0926 11
 Lab deleted test...PCC entries deleted
                               CH 0926 11
 Lab deleted test...PCC entries deleted
                               CH 0926 11
  Lab deleted test...PCC entries already deleted
```

RSN – Requeue by Sequence Number

If you have determined that no valid reason exists for a transaction not to have transmitted to the PCC, that transaction may be retransmitted using the RSN option. Also, if a transmission has been disrupted by missing or incorrect data, that transaction may be refiled after correcting or supplying the missing data. This option allows the user to refile transactions one at a time as identified by the IHS Lab Transaction Log sequence number.

```
Select IHS Lab Main Support Menu Option: RSN Requeue by Sequence
Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER: 38
SEQUENCE NUMBER: 38
                                       LRFILE: 2
  LRDFN: 5
                                       PATIENT POINTER VALUE: 1
  PANEL/TEST POINTER: LIVER FUNCTION
                                       LAB MODULE: GENERAL
  DUZ(2): 4585
                                        I/O CATEGORY: IN PATIENT
  STATUS FLAG: DELETED
                                       ENTRY DATE/TIME: SEP 30,
1997@08:04:40
  PCC ERROR FLAG: Lab deleted test...PCC entries deleted
  CLINIC STOP CODE POINTER: INTERNAL MEDICINE
  CPT LAB CODE POINTER: LIVER FUNCTION
  BILLING CPT STRING:
82250|||||;84075|||||;84450|||||;84460|||||;82977|||||
  ORDER DATE: SEP 30, 1997@08:04:40 ORDER SEQUENCE NUMBER: 1
  ORDER NUMBER: 371
                                       ORDERING PROVIDER POINTER:
BRIO, ALINA
  ORDERING PROVIDER NAME: BRIO, ALINA ORDERING LOCATION POINTER: ICU
  ORDERING LOCATION NAME: ICU
                                       COLLECTION DATE/TIME: SEP 30,
1997
 ACCESSION NUMBER: CH 0930 6
                                       SITE/SPECIMEN POINTER: BLOOD
 VERIFIER POINTER: EVANS, F.J.
                                       VERIFIER NAME: EVANS, F.J.
Do you wish to try and refile this entry?
Enter Yes or No? N// YES
```

FALL - Find ALL PCC Link Errors from Lab

This option allows for the identification of all laboratory transactions that generated an error message and failed to transmit to the PCC. It is a quick way to assess that all is going well with the link. While it is possible to requeue all of the transactions at the time of review, it is not recommended. In many cases, a transaction may not be passed to PCC because of the business rules related to institution, test cancellations, or the fact that the transaction involves a laboratory control, survey, or other non-patient specimen.

from La START W	b ITH SEQUE	ain Support NCE NUMBER: UMBER: 115/	1// <re< b=""></re<>		Find ALL	PCC Link E	Errors
		IHS I		tion Sequer PCC ERRORS		S	
1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53
54	55	56	57	58	59	60	61

Do you wish to Queue these entries for processing?

Enter Yes or No? N// <RETURN>
Entries NOT Queued

Bulletins and Mail Groups

Several menu options are available for monitoring and managing the Laboratory/PCC Link. In addition, automatic bulletins can be generated to notify the Site Manager if a problem occurs in the transmission of data from the Laboratory Package to the PCC. A number of bulletins have been predefined (see list), but may be edited to suit the needs of each site. In addition, it must be determined at each site who should be members of the mail group to receive the bulletins. Bulletins fall into two general categories: (1) those of an informational nature, and (2) those considered "fatal," which must be investigated. Descriptions of the bulletins are included in the Troubleshooting section of this manual.

One or more of the following bulletins may be generated when an error occurs:

- Update to IHS TRANSACTION LOG TO THE PCC ERROR field not done...REFILE
- PCC error flag not nulled
- Lab deleted test...PCC entries deleted
- Test subscript not defined
- Record is from file (62.3,67.1, etc.) is not Patient file
- Patient IEN is required
- No Collection date
- Field .05 of File 9009022 not a valid antibody IEN
- Field (field number) is required for PCC and cannot be null
- Write to V Lab rejected
- Write to V MIC rejected
- Write to V Blood Bank rejected
- Field .05 of File 9009022 not a valid antibiotic IEN
- Test subscript not defined
- No institution entry
- No lab entry in PCC Master Control file
- No entry in Provider file for the ORDERING PROVIDER
- No entry in PROVIDER field for the Encounter Provider
- PCC visit not created APCDFLG = (1 or 2)
- Visit not created—task terminated
- Invalid template for result display
- PCC check error
- Unknown Test Subscript—link not yet implemented
- Future Collection No update of PCC
- Field (field number) of File 9009022 is invalid
- Field .06 of File 9009022 not a valid test in File 60
- Field (field number) is required for PCC and cannot be null

See the Troubleshooting section of this manual for explanations of each bulletin type and guidelines for fixing the associated errors.

Creating a Mail Group for BLR Bulletins

The following example shows how to create a new mail group with members who will receive the BLR Transaction (TX) Log bulletins that are generated automatically when an error in transmitting data to the PCC occurs.

```
>D P^DI
VA FileMan 21.0
Select OPTION: ENTER OR EDIT FILE ENTRIES
INPUT TO WHAT FILE: BLR MASTER CONTROL// MAIL GROUP
                     (14 entries)
EDIT WHICH FIELD: ALL// <RETURN>
Select MAIL GROUP NAME: BLRLINK
Are you adding 'BLRLINK' as a new MAIL GROUP (the 15TH)? Y (Yes)
 MAIL GROUP COORDINATOR: EVANS, F.J.
Select MEMBER: EVANS, F.J.
Are you adding 'EVANS, F.J.' as a new MEM (the 1ST for this MAIL GROUP)?
Y (Yes)
Select MEMBER: <RETURN>
DESCRIPTION:
 1>This mail group receives messages from Lab/PCC Link errors
EDIT Option: <RETURN>
TYPE: PR PRIVATE
ORGANIZER: EVANS,F.J.
COORDINATOR: EVANS, F.J.// <RETURN>
Select AUTHORIZED SENDER: <RETURN>
ALLOW SELF ENROLLMENT? ^
Select MAIL GROUP NAME: <RETURN>
```

Adding Mail Groups to a Bulletin

The following example shows how to edit the bulletin to enter the mail group.

```
Select OPTION: ENTER OR EDIT FILE ENTRIES

INPUT TO WHAT FILE: MAIL GROUP// BULLETIN (91 entries)
EDIT WHICH FIELD: ALL// <RETURN>

Select BULLETIN NAME: BLRTXLOG

NAME: BLRTXLOG// <RETURN>
SUBJECT: PCC FILING ERROR FOR THIS ENTRY Replace
Select MAIL GROUP: BLRLINK
Are you adding 'BLRLINK' as a new MAIL GROUP (the 1ST for this BULLETIN)? Y (Yes)
Select MAIL GROUP: ^
```

Disabling Selected Bulletins

Bulletins may be divided into two broad categories: informational or fatal.

Examples of informational bulletins are:

- Record is from 62.3 is not Patient file
- Lab deleted test...PCC entries deleted

Examples of fatal errors would be:

- Test subscript not defined
- No entry in Provider file for the ORDERING PROVIDER

Some system users may prefer not to see informational bulletins. To prevent members of the mail group from receiving bulletins about non-patient tests, this bulletin may be disabled by setting a flag in the LOG PAT DATA ONLY field in the BLR Master Control file as follows. User requests to disable other bulletins will be addressed by the developers in the future.

```
FILE: MSTR Enter/edit BLR MASTER CONTROL FILE

Select BLR MASTER CONTROL SITE: SELLS HOSPITAL/CLINIC

SITE: SELLS HOSPITAL/CLINIC// <RETURN>

LAB LOG TRANSACTION: YES// <RETURN>

LAB LOG TO PCC: YES// <RETURN>

LOG PAT DATA ONLY: NO// Y YES

GUI LAB ORDER SEND PAT: NO// <RETURN>

GUI LAB ORDER LAB COLLECT: NO// <RETURN>

GUI LAB ORDER WARD COLLECT: NO// <RETURN>

GUI LAB MULTIPURPOSE ACC: NO// <RETURN>

ACCESSION TEST GROUP TEMPLATE: <RETURN>

START PROCESSING DATE: OCT 01, 1997// ^
```

Troubleshooting Errors

Upon installing Version 5.2 of the Laboratory package and enabling the Lab/PCC Link, a number of PCC Error messages and bulletins can be expected. These will relate primarily to incorrectly defined tests or panels in File 60 (Laboratory Test file), incorrect settings for institutions in the PCC and BLR Master Control file, and identification of providers in File 200. As these file definitions are addressed, the number of bulletins will decline and will be mostly informational in nature.

Once an error is detected in the filing of data in the PCC from the Laboratory package, the following steps are recommended for identifying the problem, correcting it, and then refiling the data in the PCC. Users may become aware of an error either via a bulletin, a VA Alert, or one of the link monitoring utilities in the BLR menu. Programmer mode may be required for reviewing an error and/or performing some of the actions to correct the error. If a menu option currently exists for correcting and refiling transactions, it will be noted.

Checking and Restarting the Transaction Processor

The link processor may be shut down if a fatal error has occurred. This may be noted by an error in the error trap, a bulletin, or a VA Alert. Check the processor status using the LS option under the IHS Lab Main Support menu. If all is going well, it should look like the following.

Processor Status		
	SEP 04, 1997@10:09:25	
	, , , , , , , , , , , , , , , , , , , ,	
Curre	ntly processing day SEP 04,	1997
		IHS Lab
Transaction		
E	ntry Position in Queue	Sequence
Number		_
Took Entere Aggiorned	Г 4 1	164 310
Last Entry Assigned	541	164,310
Last Entry Processed	541	164,310
Press Enter to continue:	<return></return>	
Fless Elicel CO Collettine.		

The Entry Position in the Queue is a number that begins with 1 at the beginning of each day. The system automatically assigns the entry numbers and as long as the system is keeping up, the last entry processed matches the last entry assigned and the date listed is the current date.

The IHS Lab Transaction Sequence Number is the number assigned by the system to each test or panel ordered. Each transaction's status flag is updated to accessioned, resulted, or deleted as the test or panel is processed through the lab. The transaction sequence number does not change once assigned. This number corresponds to the total number of tests and panels ordered since the BLR Master Control file LAB LOG TRANSACTION field was set to "Yes" during setup.

Processor Status		
	SEP 04, 1997@10:08:41	
Cu	rrently processing day SEP 04, 1997	IHS Lab
Transaction		Ins hab
	Entry Position in Queue	Sequence
Number		
Last Entry Assigned	541	164,310
Last Entry Processed	538	164,307
Now Processing Entry	539	164,308
Link is not running!		
Press Enter to exit:		

You may see a message, "Link is not running!" This could mean one of two things:

- 1. All current transactions have been processed and none of the Lab options has been used for ten minutes so the processor has shut down. The processor will restart as soon as any of the Lab menu options are accessed.
- 2. The processor has shut down because of some kind of a "fatal error." Usually you will see a significant discrepancy between the Last Entry Assigned and the Last Entry Processed. You may also see a processing date prior to the current date. You will probably also have had some kind of a warning via the generation of errors in the error trap and/or VA alerts.

If the processor does not restart when accessing the Lab menu, you should review the Transaction Sequence Number being processed when the processor shut down. Use the Support Menu option, INQ. In general, the processor will only shut down if some major problem with a test definition occurs. You (your Site Manager or one of the support staff in Tucson) can restart the processor by using FileMan Enter/Edit to "skip" the bad sequence number and advance to the next one (or two or three, etc., if the panel was bad).

At the "Select Processing Date" prompt, enter the date when the processor stopped. Do not make an entry for the Last Transaction Assigned, just accept the value that the system has assigned. Enter the sequence number for the Last Transaction Processed +1 to bypass the bad sequence number. Then recheck to see that the processor has restarted. It may be necessary to increment the sequence number more than one if there was more than one bad transaction. This is an unusual event and it is not expected that this will occur on a frequent basis.

Once the processor status has been restarted, check to see if any LR, LA, or BLR errors are in the error trap. If any errors exist, please call Tucson DIR for programming assistance.

Informational Bulletins

The following bulletins are considered informational and once the user becomes familiar with their content, they may not require further review.

Lab deleted test...PCC entries deleted. Tests have been deleted so the tests have been removed from PCC. The transactions still exist in the IHS Lab Transaction Log with this PCC ERROR Flag.

Record is from file (file name – 62.3, 67, 67.1) – is not Patient file. The data is not patient data; it may be a control, a referral patient, research, or an environmental specimen. The transactions still exist in the IHS Lab Transaction Log with this PCC ERROR flag. See the example below.

```
Subj: PCC FILING ERROR FOR THIS ENTRY [#1007787]29 Sep 97 14:43 17 Lines From: POSTMASTER in 'IN' basket. Page 1 **NEW**

An entry in PCC could not be created for the following lab order because there is a filing error reported in PCC.

PATIENT NAME: PATIENT DFN: VISIT DATE:

LAB SYSTEM ORDER NUMBER: 105058 ACCESSION NUMBER:

LAB TEST: TSH TX LOG IEN: 302002

PCC ERROR: Record is from file 62.3 - is not Patient File

No results entered for this test were transferred into the PCC.
```

Future collection – No update of PCC. A future collection date (other than today's date) was entered. Data with future collection dates are not transmitted to the PCC. This transaction is automatically updated once the specimen is collected and transmitted to the PCC.

No Lab entry in PCC Master Control File. Data was processed for a patient that was seen at a site that is not defined in the PCC Master Control file. If the site maintains its own separate PCC at a site distinct from the laboratory, this is an informational message because data should not be passed to the PCC. If data should be passed to the PCC because of a common database, an entry for that institution needs to be entered into the PCC Master Control file.

Unknown Test Subscript – **link not yet implemented.** The subsection to which the test has been defined does not have a corresponding file for data in the PCC; for example, AP for Anatomical Pathology or CY for Cytology. See the example bulletin below.

```
Subj: PCC FILING ERROR FOR THIS ENTRY [#1008239]02 Oct 97 09:27 10 Lines From: POSTMASTER in 'IN' basket. Page 1 **NEW**

An entry in PCC could not be created for the following lab order because there is a filing error reported in PCC.

PATIENT NAME: DEMO,PATIENT PATIENT DFN: 11759 VISIT DATE: OCT 2,1997

LAB SYSTEM ORDER NUMBER: 105464 ACCESSION NUMBER:
LAB TEST: PHLEBOTOMY TX LOG IEN: 309109

PCC ERROR: Unknown Test Subscript - link not yet implemented
```

No results entered for this test were transferred into the PCC.

Investigating Fatal Errors

The easiest way to investigate so-called "fatal" errors is to:

- 1. Identify the failed transaction sequence number by reviewing the bulletin generated by the error or use the S menu option: Search Transaction Log for PCC Link Requeue.
- 2. Either use INQ, Inquire into the IHS LAB Transaction Log, or review the bulletin text to identify the patient, the accession number, the date of service, and the order number.
- 3. Use one or all three menu options in the Laboratory Menu: Lookup Accession, Review by Order Number, or Order/Test Status to determine what sequence of events occurred on the laboratory side that may have initiated the failed transaction.
- 4. If it is determined that the data was not passed to the PCC for a valid reason, for instance, the test was deleted in the laboratory or the patient was from a location not defined in the BLR or Master Control file, no further action is necessary and the transaction will not be refiled.
- 5. If all indications on the Laboratory side are that this is valid data for transmission to the PCC, investigate the file settings indicated by the bulletin to determine if a correction must be made. Make any necessary corrections in the transaction using FileMan Enter/Edit. Make any necessary corrections in files as indicated by the bulletin. Refile the corrected transaction(s).
- 6. In the example below, the error is "Lab Module not defined." The phrase "lab module" in the PCC equates to "test subscript" in the Laboratory Package Laboratory Test file (#60). In this case, entry 244 in the IHS Lab Transaction Log file failed because the lab test IEN 267 does not have a subscript defined in file 60. A sequence of steps is listed here to follow when investigating, correcting, and refiling a transaction.

Note: Bulletins come in several different formats, depending on the source of the error. Occasionally you may want to access the PCC to see if a test passed the link despite the error message. Use the DISP menu option in the PCC to review the V LAB, V MICRO, etc. files for the date of the lab visit.

1. Read the MailMan Bulletin and Identify the Transaction Log Number

```
Subj: PCC FILING ERROR FOR THIS ENTRY [#661096] 14 Apr 97 19:15 10 Lines From: POSTMASTER in 'IN' basket. Page 1 **NEW**

An entry in PCC could not be created for the following lab order because there is a filing error reported in PCC.

PATIENT NAME: PATIENT DFN: VISIT DATE:

LAB SYSTEM ORDER NUMBER: 76693 ACCESSION NUMBER: CHEM 0904 21

LAB TEST: 267 TX LOG IEN: 244

PCC ERROR: LAB MODULE not defined

No results entered for this test were transferred into the PCC.
```

2. Inquire into the Referenced Transaction Log

Select OPTION: INQ INQUIRE TO FILE ENTRIES

OUTPUT FROM WHAT FILE: IHS LAB TRANSACTION LOG// <RETURN>
Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER: `244 ...OK? Yes//
<RETURN> (Yes)
ANOTHER ONE: <RETURN>
STANDARD CAPTIONED OUTPUT? Yes// <RETURN> (Yes)
Include COMPUTED fields: (N/Y/R/B): NO// <RETURN> No record number (IEN), no Computed Fields

SEQUENCE NUMBER: 244 LRFILE: 2

LRDFN: 11288 PATIENT POINTER VALUE: 41149

PANEL/TEST POINTER: CHEM 7

DUZ(2): 4587 I/O CATEGORY: OUT PATIENT

STATUS FLAG: ACCESSIONED ENTRY DATE/TIME: APR 11, 1997@16:18:24

PCC ERROR FLAG: LAB MODULE not defined

LAB TEST LIST COST: 1.52

CLINIC STOP CODE POINTER: FAMILY PRACTICE

ORDER DATE: APR 11, 1997@16:18:24 ORDER SEQUENCE NUMBER: 36

ORDER NUMBER: 76693

ORDERING PROVIDER POINTER: NEUFELD, BRENDA G
ORDERING PROVIDER NAME: NEUFELD, BRENDA G
ORDERING LOCATION POINTER: SAN XAVIER CLINIC

ORDERING LOCATION NAME: SXC

COLLECTION DATE/TIME: APR 11, 1997@16:18:24

ACCESSION NUMBER: CH 0411 8 SITE/SPECIMEN POINTER: SERUM VERIFIER POINTER: WARES,LORI VERIFIER NAME: WARES,LORI

3. Correct the Error in the Transaction Log

>D P^DI

VA FileMan 21.0

Select OPTION: ENTER OR EDIT FILE ENTRIES

INPUT TO WHAT FILE: IHS LAB TRANSACTION LOG// <RETURN>

EDIT WHICH FIELD: ALL// <RETURN>

Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER: `244 244

...OK? Yes// <RETURN> (Yes)
SEQUENCE NUMBER: 244// <RETURN>

LRFILE: 2// <RETURN>
LRDFN: 11288// <RETURN>

PATIENT POINTER VALUE: 41149// <RETURN>

PATIENT NAME: <RETURN>

PANEL/TEST POINTER: CHEM 7// <RETURN>

```
PANEL/TEST NAME: <RETURN>
LAB MODULE: ?
   Enter SUBSCRIPT Code for section (ex: CH for GENERAL)
   Choose from:
    CH
         GENERAL
   ΜI
         MICROBIOLOGY
   BB
        BLOOD BANK
    ΑU
         AUTOPSY
    CY
         CYTOPATHOLOGY
    SP
        SURGICAL PATHOLOGY
    OT
         OTHER
LAB MODULE: CH GENERAL
DUZ(2): 4587// ^
```

You can then inquire into the failed transaction log entry after editing it, as follows.

```
Select OPTION: INQ INQUIRE TO FILE ENTRIES

OUTPUT FROM WHAT FILE: IHS LAB TRANSACTION LOG// <RETURN>
Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER: `244 244

...OK? Yes// <RETURN> (Yes)

ANOTHER ONE: <RETURN>
STANDARD CAPTIONED OUTPUT? Yes// <RETURN> (Yes)
Include COMPUTED fields: (N/Y/R/B): NO// <RETURN> No record number (IEN), no Computed Fields
```

```
SEQUENCE NUMBER: 244
                                   LRFILE: 2
LRDFN: 11288
                                   PATIENT POINTER VALUE: 41149
PANEL/TEST POINTER: CHEM 7
                                  LAB MODULE: GENERAL
DUZ(2): 4587
                                   I/O CATEGORY: OUT PATIENT
STATUS FLAG: ACCESSIONED
                                   ENTRY DATE/TIME: APR 11, 1997@16:18:24
PCC ERROR FLAG: LAB MODULE not defined
LAB TEST LIST COST: 1.52
CLINIC STOP CODE POINTER: FAMILY PRACTICE
ORDER DATE: APR 11, 1997@16:18:24 ORDER SEQUENCE NUMBER: 36
ORDER NUMBER: 76693
ORDERING PROVIDER POINTER: NEUFELD, BRENDA G
ORDERING PROVIDER NAME: NEUFELD, BRENDA G
ORDERING LOCATION POINTER: SAN XAVIER CLINIC
ORDERING LOCATION NAME: SXC
COLLECTION DATE/TIME: APR 11, 1997@16:18:24
ACCESSION NUMBER: CH 0411 8 SITE/SPECIMEN POINTER: SERUM
VERIFIER POINTER: WARES, LORI
                                   VERIFIER NAME: WARES, LORI
```

3. Refile the Entry After Error Correction

Refile the transaction after correction using the option RSN – Requeue by Sequence Number. Enter the sequence number 244 at the prompt. Review the screen to be sure this is the appropriate transaction and answer "Yes" to the prompt, "Do you wish to try to refile this transaction?"

4. Correct Error in the Lab File that Prevented the Initial Transmission

In this example, you would fix the missing entry in File 60 by using FileMan option, Enter/Edit. Edit the SUBSCRIPT field at the Edit prompt, as shown here. In this example, you can then enter `267 to identify the test, instead of entering the test name. (For specific information on correcting errors in Lab files, refer to the Laboratory Package Planning and Implementation Guide.)

```
[LBP, AAA] > D P^DI
VA FileMan 21.0
Select OPTION: ENTER OR EDIT FILE ENTRIES
INPUT TO WHAT FILE: AUTO INSTRUMENT// 60 LABORATORY TEST
                                          (1037 entries)
EDIT WHICH FIELD: ALL// SUBSCRIPT
THEN EDIT FIELD: <RETURN>
Select LABORATORY TEST NAME: CHEM 7
SUBSCRIPT: CHEM, HEM, TOX, SER, RIA, ETC.// ?
     Choose from:
               CHEM, HEM, TOX, SER, RIA, ETC.
       CH
       MΙ
               MICROBIOLOGY
       BB
              BLOOD BANK
               ELECTRON MICROSCOPY
       SP
                SURGICAL PATHOLOGY
       CY
               CYTOLOGY
       ΑU
               AUTOPSY
       WK
                WORKLOAD
SUBSCRIPT: CHEM, HEM, TOX, SER, RIA, ETC.// CH CHEM, HEM, TOX, SER,
RIA, ETC.
Select LABORATORY TEST NAME: <RETURN>
```

Other Fatal Errors

An example of another fatal error is: Field _____ of File 9009022 not in Provider file. A review of the data dictionary for File 9009022 indicates that field 1104 is the ordering provider and is a pointer to the New Person file, File 200. An entry must be made for the ordering provider in the appropriate files and the transactions with this error message must be edited and refiled. The easiest way to refile a panel of tests with this type of error is to create a sort template (see page 21) and refile using the BLR menu option, RST, Requeue Transaction by Sort Template.

```
Subj: PCC FILING ERROR FOR THIS ENTRY [#709373] 30 Sep 97 15:32 10 Lines From: POSTMASTER in 'IN' basket. Page 1 **NEW**

An entry in PCC could not be created for the following lab order because there is a filing error reported in PCC.

PATIENT NAME: PATIENT, DEMO PATIENT DFN: 43544 VISIT DATE: SEP 30,1997 LAB SYSTEM ORDER NUMBER: 87813 ACCESSION NUMBER: UA 0930 4 LAB TEST: TRANSITIONAL EPITHELIAL CELLS TX LOG IEN: 191829 PCC ERROR: Field 1104 of file 9009022 not in Provider file

No results entered for this test were transferred into the PCC.
```

A fatal error with a bulletin stating "Something wrong—problem with IHS Lab Transaction Cross Reference" usually means one of two things:

- 1. There may be a discrepancy between the institution where the user is logged on and the institution defined in the BLR Master Control file.
- 2. There may be a problem with a File 60 test definition in which two different tests point to the same data name in File 63.

The starting point in resolving this error is to identify the institution of the patient and the test that has been rejected. Depending on the findings, a correction may have to be made in File 60 following the guidelines in the Laboratory Package Planning and Implementation Guide. Alternatively, it may be found that the problem is with an institution discrepancy, which may or may not require editing entries in the BLR Master Control file or PCC Master Control file, depending on the relationships of the PCC databases of the institutions.

```
Subj: IHS Lab Transaction Log Error [#709501] 02 Oct 97 09:50 11 Lines From: POSTMASTER in 'IN' basket. Page 1 **NEW**

An entry in the IHS Lab Transaction Log could not be created because of missing or invalid data.

IHS Lab Transaction Log ERROR:

Something wrong -- problem with IHS Lab Transaction Log Cross Reference: ^BLRTX LOG("AAT", CH 1002 4,175)

VARIABLES:
```

The fatal message "PCC Visit not created APCDFLG = (1 or 2)" indicates that either an invalid template specification was made, the Visit DFN is incorrect, or ^DIE rejected the data for a variety of reasons. The best way to handle this kind of bulletin is to review the sequence of events on the Laboratory side and determine whether data would be passed to the PCC under the normal business rules. If it is determined that data should have passed to the PCC, call Tucson DIR for assistance in resolving this error.

```
Subj: PCC FILING ERROR FOR THIS ENTRY [#1007885]30 Sep 97 16:32 10 Lines From: POSTMASTER in 'IN' basket. Page 1 **NEW**

An entry in PCC could not be created for the following lab order because there is a filing error reported in PCC.

PATIENT NAME: DEMO, PATIENT PATIENT DFN: 29146 VISIT DATE: SEP 30,1997LAB SYSTEM ORDER NUMBER: 105272 ACCESSION NUMBER: CH 0930 14 LAB TEST: GLUCOSE TX LOG IEN: 305520 PCC ERROR: PCC Visit not created APCDFLG = 2

No results entered for this test were transferred into the PCC.
```

Other bulletins that are considered fatal and require investigation are listed below. The process of review, resolution, and refiling is the same regardless of the type of bulletin.

Update to IHS transaction log to the PCC ERROR field not done..REFILE. An update was not made for a particular sequence number. REFILE suggests that the necessary correction be made to the sequence's transaction and then refiled.

PCC ERROR FLAG field not nulled. An attempt was made to null out some fields and the attempt failed. Most of the time this operation is used when the V file number and the V file IEN are being removed from a transaction when results have been deleted.

Patient IEN is required. The PATIENT IEN field is not set.

No collection date. No collection date was entered for this transaction.

No institution entry. Data was processed for a patient that was seen at a site that is not defined in the Hospital Location file.

No entry in Provider file for the Ordering Provider. The ordering provider entered is not defined in the Person file(16) as a provider, or there is no entry in the Provider file(6) for this provider.

No entry in Provider file for the Encounter Provider. The encounter provider entered is not defined in the Person file(16) as a provider, or there is no entry in the Provider file(6) for this provider.

Visit not created – task terminated. The Visit entry could not be created. No further processing can occur for this entry.

Field _____ **of file 9009022 is invalid.** Generic reject message created when a specific reason for a PCC rejection is not determined.

Write to V LAB file rejected. Failed a V LAB field edit so update of this entry to the PCC is terminated.

Write to V Micro file rejected. Failed a V Micro field edit so update of this entry to the PCC is terminated.

Write to V Blood Bank rejected. Failed a V Blood Bank field edit so update of this entry to the PCC is terminated.

Field .06 of File 9009022 not a valid test in Dile 60. The test entered is not defined in the Laboratory Test file (60).

Field .06 of File 9009022 not a valid antibiotic IEN. An invalid antibiotic was entered in this field. Check entries in the antimicrobial susceptibility file (62.06).

Field .06 of File 9009022 not a valid antibody IEN. An invalid antibody was entered in this field. Check entries in the Function Field file (61.3).

Field	is required for PCC and cannot be null.	. No data was entered into a required
field.		

APPENDIXES

Appendixes 38 December 1997

Appendix A: IHS Lab 1997 CPT Codes

IHS LAB CPT CODE	LIST APR 14,19 PANEL/TEST	997 12:52	PAGE 1	
NAME	PANEL/TEST	CPT CODE	MODIFIER	
QUALIFIER				
 1,25 DIHYDROXYV	1,25-DIHYDROXYVIT D3 11-DEOXYCORTISOL 17-HYDROXYCORTICOSTE	82652	.90	
11-DEOXYCORTISO	11-DEOXYCORTISOL	82634	.90	
17-HYDROXYCORTI	17-HYDROXYCORTICOSTE	83491	.90	
7-HYDROXYPROGE	17-HYDROXYPROGESTERO	83498	9.0	
17-KETOGENIC ST	17-KETOGENIC STEROID 17-KETOSTEROIDS, TOTA 5' NUCLEOTIDASE ABO/RH TYPING	83582	90	
17-KETOSTEROIDS	17-KETOSTEROIDS TOTA	83586	90	
5' NIICLEOTIDASE	5' NIICLEOTIDASE	83915	90	
ABO/RH TYPING	ABO/RH TYPING	86900	. , ,	
100/101 111110	1100/1011 11111100	86901		
\CETXI.DEUVDE	λ CETAL DEUVDE	82000	9.0	
CETALDERIDE	ACETALDEHYDE	82003	. 90	
ACETAMINOPHEN	ACETAMINOPHEN ACETONE ACETYLCHOLINE RECEPT ACID PHOSPHATASE	02003		
ACTIONT	ACETONE DECEDE	04009	0.0	
ACELYLCHOLINE R	ACELYLCHOLINE RECEPT	04238	.90	
ACID PHOSPHATAS	ACID PHOSPHATASE	84060	0.0	
ACTH	ACTH ADDIS COUNT ADENOVIRUS TITER AFB CULTURE	82024	.90	
ADDIS COONI	ADDIS COUNT	81033	0.0	
ADENOVIRUS TITE	ADENOVIRUS TITER	86603	.90	
AFB CULTURE	AFB CULTURE	87117		
AFB CULTURE & S	AFB CULTURE & SMEAR	87117		
	AFB SMEAR	87206		
ALBUMIN	ALBUMIN	82040		
MICROALBUMIN	AFB SMEAR ALBUMIN ALBUMIN, MICRO ALBUMIN/CREATININE R	82044		QW
ALBUMIN/CREATIN	ALBUMIN/CREATININE R	82570		
		\times $/114$ /		
ALDOLASE	ALDOLASE	82085	.90	
ALDOSTERONE	ALDOLASE ALDOSTERONE ALK PHOSPHATASE, HEA ALKALINE PHOSPHATASE	82088	.90	
ALK PHOSPHATASE	ALK PHOSPHATASE, HEA	84078	.90	
ALKALINE PHOSPH	ALKALINE PHOSPHATASE	84075		
ALPHA-1-ANTITRY	ALPHA-1-ANTITRYPSIN	82103	.90	
AT.DUA FETODDOTE	λΤ.ΟΗλ _ΕΕΤΌΟΡΩΤΕΙΝ	82105	an	
ALUMINUM	ALUMINUM	82108	.90	
AMIKACIN	AMIKACIN	80150		
AMINOLEVULINIC	AMINOLEVULINIC ACID	82135	.90	
AMITRIPTYLINE	ALUMINUM AMIKACIN AMINOLEVULINIC ACID AMITRIPTYLINE	80152	.90	
AMITRYPTILINE &	AMITRIPTYLINE & NORT	80152	.90	
		80182	.90	
AMMONIA	AMMONIA	82140		
AMOEBIC IHA ANT	AMOEBIC IHA ANTIBODY	86753	.90	
AMOXAPINE	AMOXAPINE	80299	.90	
AMPHETAMINE SCR	AMOXAPINE AMPHETAMINE SCREEN	80101	.90	
AMPHETAMINE SCR	AMPHETAMINE SCREEN AMPHETAMINES	82145	.90	
AMPICILLIN	AMPHETAMINES AMPICILLIN	80299		
=				
AMYLASE	AMYLASE	82150		
ANA PANEL	ANA PANEL	86038		
ANAEROBIC CULTU	ANAEROBIC CULTURE	87075	0.0	
ANDROSTENEDIONE	ANDROSTENEDIONE	82157	.90	
ANGIOTENSIN-1	ANGIOTENSIN-1	82164	.90	
ANTIMITOCHONDRI	ANTI MITOCHONDRIAL A	86255	.90	
ANTI SMOOTH MUS	ANTI SMOOTH MUSCLE	86255	.90	
ANTI-DEOXYRIBON	ANTI-DEOXYRIBONUCLEA	86215		
ANTI-DNA ANTIBO	ANTI-DNA ANTIBODY	86226	.90	
ANTI-EPIDERMAL	ANTI-EPIDERMAL AB	86255	.90	
ANTI-GLOM BASEM	ANTI-GLOM BASEMENT M	83520	.90	

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ANTI-HYALURONID	ANTI-HYALURONIDASE T	86849	.90	
ANTI-MICROSOMAL	ANTI-MICROSOMAL ANTI ANTI-MYOCARDIAL AB ANTI-PARIETAL CELL A ANTI-RETICULIN AB	86376	.90	
ANTI-MYOCARDIAL	ANTI-MYOCARDIAL AB	86255	.90	
ANTI-PARIETAL C	ANTI-PARIETAL CELL A	86255	.90	
ANTI-RETICULIN	ANTI-RETICULIN AB	86255	.90	
LANTT-RNP	ANTT-RNP	86235	. 90	
ANTI-SKELETAL M	ANTI-SKELETAL MUSCLE	86255	.90	
ANTI-STRIATED M	ANTI-STRIATED MUSCLE	86255	.90	
ANTI-THYROGLORII	ANTI-SKELETAL MUSCLE ANTI-STRIATED MUSCLE ANTI-THYROGLOBULIN A ANTI-THYROID ANTIBOD	86800	.90	
ANTI-THYROID AN	ANTI-THYROID ANTIROD	86376	.90	
ANTICENTROMERE	ANTICENTROMERE	86038	90	
ANTICENTROMERE	ANTICENTROPERE	00030	.90	
ANTIDIORETIC HO	ANTIDIURETIC HOR	01300	.90	
ANTIMONI	ANTIMONY ANTISTREPTOLYSIN SC ANTITHROMBIN III	03013	.90	
ANTISIREPIOLISI	ANTISTREPTOLYSIN SC	86063	.90	
ANTITHROMBIN II	ANTITHROMBIN III	85300	2.0	
ARBOVIRUS CALIF	ARBOVIRUS CALIF TITE	86790	.90	
ARBOVIRUS EEE T	ARBOVIRUS EEE TITER	86790	. 90	
ARBOVIRUS SLE T	ARBOVIRUS SLE TITER	86790	.90	
ARBOVIRUS WEE T	ARBOVIRUS WEE TITER	86790	.90	
ARSENIC	ARBOVIRUS EEE TITER ARBOVIRUS SLE TITER ARBOVIRUS WEE TITER ARSENIC	82175	.90	
ARTERIAL BLOOD	ARTERIAL BLOOD GASES	82803		
ARYLSULFATASE A	ARYLSULFATASE A	84999	.90	
ASO	ASO ASPERGILLUS AB IMMUN ASPERGILLUS COMPLEME	86060	.90	
ASPERGILLUS AB	ASPERGILLUS AB IMMUN	86329	.90	
ASPERGILLUS COM	ASPERGILLUS COMPLEME	86171	. 90	
BARBITIRATE SCR	BARBITURATE SCREEN	80100	.90	
BRABITIRATES	BARBITURATE SCREEN BARBITURATES BENCE JONES PROTEIN BENZENE BENZODIAZEPINE SCREE	82205	.90	
BENCE JONE DROT	RENCE JONES DROTEIN	81099	. 50	
DENCE CONE FROI	DENCE CONES FROIEIN	92491	.90	
DENZODIAZEDINE		02491	.90	
DENZODIAZEPINE	BENZODIAZEPINE SCREE BENZODIAZEPINES	00100	.90	
BENZODIAZEPINES	BENZODIAZEPINES	00154	.90	
BERILLIUM	BERYLLIUM	83015	.90	
BETA-2-MICROGLO	BERYLLIUM BETA 2-MICROGLOB BILIRUBIN, DIRECT BILIRUBIN, TOTAL	82232	.90	
BILIRUBIN, DIRE	BILIRUBIN, DIRECT	82250		
BILRUBIN, TOTAL	BILIRUBIN, TOTAL	82250		
	BILIRUBIN, TOTAL & DI	82251		
BLASTOMYCES ANT	BLASTOMYCES AB	86612	.90	
BLASTOMYCES COM	BLASTOMYCES COMPLEME BLEEDING TIME BLOOD CULTURE	86171	.90	
BLEEDING TIME	BLEEDING TIME	85002		
BLOOD CULTURE	BLOOD CULTURE	87040		
BONE MARROW	BONE MARROW	85097		
BROMIDE	BROMIDE	84311	.90	
BRUCELLA AGGLUT	BRUCELLA AGGLUTINATI	86622	.90	
BRUCELLA BLOCKI	BRUCELLA BLOCKING AN	86622	.90	
BUTALBITAL	BUTALBITAL	82205	.90	
C REACTIVE PROT	C REACTIVE PROTEIN		.90	
	C-1Q COMPLEMENT COMP		.90	
C-PEPTIDE	C-PEPTIDE	84681	.90	
C1 ESTERASE INH	C1 ESTERASE INHIBIT.	86160	.90	
CAFFEINE	CI ESTERASE INITIBIT:	82491	.90	
CALCITONIN	CALCITONIN	82308	.90	
		82310	. 90	
CALCIUM	CALCIUM		0.0	
CALCULUS	CALCULUS	82360	.90	
CANDIDA IMMUNOD	CANDIDA IMMUNO DIFF	86628	.90	
CANDIDA PRECIPI	CANDIDA PRECIPITIN	86403	.90	
CANNABINOIDS	~~~~~~~~~~~			
	CANNABINOIDS	80100	.90	
CARBAMAZEPINE	CARBAMAZEPINE	80100 80156	.90	
CARBAMAZEPINE CARDIAC ENZYMES	CARBAMAZEPINE CARDIAC ENZYMES	80156	.90	
CARBAMAZEPINE	CARBAMAZEPINE		.90	

Appendix A 40 December 1997

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CATECHOLAMINES	CATECHOLAMINES	82384	.90
CATECHOLAMINES,	CATECHOLAMINES, FRAC	82384	.90
BC	CBC	85027	
BC & MORPHOLOG	CBC & MORPHOLOGY (NO		
		85008	
3C & MORPHOLOG	CBC & MORPHOLOGY (WI	85007	
BC PROFILE	CBC PROFILE	85025	
Δ	CFA	82378	.90
A-S	CEA-S, RIA CERULOPLASMIN CHEM 11 CHEM 20	82378	.90
RULOPLASMIN	CERULOPLASMIN	82378 82390 80011	.90
EM 11	CHEM 11	80011	
HEM 20	CHEM 20	80019	
F:M 7	CHEM 7	80007	09990
I.AMYDTA TTTER	CHLAMYDIA TITER CHLORDIAZEPOXIDE CHLORIDE	86631	.90
IORDIAZEDOXID	CHIORDIA ZEDOXIDE	80154	.90
LORIDE	CHIORDIAZELOXIDE	82435	.50
T ODDDOMA 7 TNE	CHLORPROMAZINE		9.0
IOT ECKEDOT	CHLORPROPAMIDE	04022	.90
TOT TWEGGED YOU TOTED I FKOT	CHOLINEGED A CE	82465 82480	.90
ODIONIC COMP	CHOLESTEROL CHOLINESTERASE CHORIONIC GONADOTROP	0448U	.90
HORIONIC GONAD	CHORIONIC GONADOTROP	84/03	.90
		82495	
LONAZEPAM	CLONAZEPAM	80154	.90
)2)2TOTAL	CO2 CO2T COBALT COCAINE	82374 82803 82190	
2TOTAL	CO2T	82803	
BALT	COBALT	82190	.90
CAINE	COCAINE	80100	
CCIDIOIDES AB	COCCIDIODES AB	86635	
CCIDIOIDES PR	COCCIDIODES PRECIPIT COCCIDIODES SCREEN	86635	.90
CCIDIODES SCR	COCCIDIODES SCREEN	86635	
OCCIDIODES SCR OCCIDIOIDES CF	COCCIDIOIDES CF TITE		.90
CCIDIOIDES ID	COCCIDIOIDES IDCF TI	86635	.90
CCIDIODES LPA	COCCIDIOIDES LPA TIT	86635	.90
MPLEMENT C2	COMPLEMENT C2	86160	.90
MPLEMENT C3	COMPLEMENT C3	86160	.90
MPLEMENT C3 MPLEMENT C4	COMPLEMENT C2 COMPLEMENT C3 COMPLEMENT C4	86160	.90
MPLEMENT C5	COMPLEMENT C5	86160	.90
		86160	
			.90
MPLEMENT TOTA	COMPLEMENT CH50 COMPLEMENT TOTAL	86162 86162	.90
	COOMBS, DIRECT/INDIR		
MUCI / INDINICI	COUNDS, DIRECT/INDIR	86850	
PPER	COPPER	82525	.90
RTICOSTERONE	COPPER CORTICOSTERONE		.90
		82528	
RTISOL	CORTISOL	82530	.90
XSACKIE A 1-1	COXSACKIE A 1-10 TIT	86658	
DXSACKIE B 1-6	COXSACKIE B 1-6	86658	
PK	CPK	82550	
PK-MB	CPK-MB	82553	
K ISOENZYMES	CPK-MB/CPK	82552	
REATINE	CREATINE	82540	.90
REATININE	CREATININE	82565	
REATININE CLEA	CREATININE CLEARANCE	82575	
		81050	
RYPTOCOCCUS AN	CRYPTOCOCCUS ANTIGEN	86313	.90
		82947	
F GLUCOSE	CSF GLUCOSE	0271	Į.
	CSF GLUCOSE CSF PROTEIN	84155	
SF PROTEIN			
SF GLUCOSE SF PROTEIN ULTURE & SUSCE YANIDE	CSF PROTEIN	84155	.90

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CYTOMEGALOVIRUS	CYTOMEGALO IFA	86313	.90	
CYTOMEGALOVIRUS	CYTOMEGALOVIRUS	86644	.90	
		86645	.90	
DARK FIELD MICR	DARK FIELD MICROSCOP DESIPRAMINE DHEA	87164		
DESIPRAMINE	DESIPRAMINE	80160	.90	
DHEA	DHEA	82626	.90	
DHEA-S	DHEA-S	82627	. 90	
DIAZEPAM	DIAZEPAM	80154	90	
DIBLICATOR NUMBE	DARK FIELD MICROSCOP DESIPRAMINE DHEA DHEA-S DIAZEPAM DIBUCAINE NUMBER DIFF & RBC MORPHOLOG DIGITOXIN	82638	90	
MANUAL DIFFEREN	DIFF & RBC MORPHOLOG	85007	. , ,	
DIGITOXIN	DIGITOXIN DIGOXIN DILANTIN DIPHENHYDRAMINE DISOPYRAMIDE DNA PROBE CHLAMYDIA DNA PROBE GC	82640		
DIGOXIN	DIGOXIN	80162		
PHENYTOIN	DILANTIN	80185		
DIDHENHYDRAMINE	DIDHENHADBVMINE	80299	9.0	
DISODVRAMIDE	DISODARANDE	80299	90	
CHIAMVDIA DNA D	DNA DPORE CHIAMVDIA	97179	90	
CC DNA DDODE	DNA PRODE CILLAMIDIA	07170 07170	90	
DOVEDIN	DOXEPIN ECHO,14,18,20,25,28 ECHO,2,3,4,7,8,11 TI ECHO,6,9,16,30 TITER EPINEPHRINE	0/1/9	. 90	
DOKEPIN	DOALPIN	00100	.90	
ECHO, 14, 18, 20, 2	ECHO,14,18,20,25,28	86658	.90	
ECHO, 2, 3, 4, 7, 8,	ECHO, 2, 3, 4, /, 8, 11 11	86658	.90	
ECHO, 6, 9, 16, 30	ECHO, 6, 9, 16, 30 TITER	86658	.90	
EPINEPHRINE	EPINEPHRINE	82384	.90	
EPSTEIN BARR	EPSTEIN BARR	86663	. 90	
ERYTHROPOIETIN	ERYTHROPOIETIN	82668	. 90	
ESTRADIOL RECEP	ESTRADIOL RECEPTOR A	84233	.90	
ESTRADIOL, 17-B	ESTRADIOL, 17-B	82670	.90	
ESTRIOL	ESTRIOL	82677	.90	
ESTROGEN	ESTROGEN	82670	.90	
		82677	.90	
		82679	.90	
ESTRONE	EPSTEIN BARR ERYTHROPOIETIN ESTRADIOL RECEPTOR A ESTRADIOL, 17-B ESTRIOL ESTROGEN ESTRONE ETHANOL ETHOSUXIMIDE ETHOTOIN FACTOR II FACTOR XIII FATTY ACIDS, FREE	82679	.90	
ALCOHOL	ETHANOL	82055		
ETHOSUXIMIDE	ETHOSUXIMIDE	80168	.90	
ETHOTOIN	ETHOTOIN	80299	.90	
FACTOR II	FACTOR II	85210	.90	
FACTOR XIII	FACTOR XIII	85290	.90	
FATTY ACIDS, FR	FATTY ACIDS, FREE	82725	.90	
FEBRILE AGGLUTI	FEBRILE AGGLUTININS	86000	.90	
FECAL FAT	FECAL FAT	82705		
FECAL LEUCOCYTE	FECAL LEUKOCYTES	87205		
FERRITIN	FECAL FAT FECAL LEUKOCYTES FERRITIN	82728	.90	
FIBRIN SPLIT PR		85362	.90	
FIBRINGEN	FIBRINOGEN	85384	. , ,	
FLUID BILIRUBIN		82250		
FLUORIDE	FLUORIDE	82735	.90	
FLUPHENAZINE-PR	FLUPHENAZINE-PROLIXN	84022	.90	
FOLATE	FOLATE	82746	.90	
FREE T4	FREE T4	84439	.90	
FSH FTA-ABS	FSH	83001	.90 .90	
	FTA-ABS FUNGAL ANTIGEN	86781		
FUNGAL ANTIGEN	FUNGAL ANTIGEN	86606	.90	
		86635	.90	
		86698		
		86628	.90	
		86612	.90	
· · ·	G-6-PD, QUANTITATIVE		.90	
GASTRIN	GASTRIN	82941	.90	
GC CULTURE	GC CULTURE	87081		
GENTAMICIN	GENTAMICIN	80170		
GGT	GGT	82977		
L				

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Oratory v 5.2/PCC Link				i ecililicai iviali
GLUCAGON	GLUCAGON		.90	
GLUCOSE	GLUCOSE	82947		
GLUCOSE TOLERAN	GLUCOSE TOLERANCE TE	82951		
		82952		
GLUCOSE,OTHER	GLUCOSE, OTHER GLUTAMINE	82947		
GLUTAMINE	GLUTAMINE	82975	.90	
GRAM STAIN	GRAM STAIN	87205		
GROWTH HORMONE	GROWTH HORMONE	83003	.90	
GTT, 1 HR	GROWTH HORMONE GTT, 1 HR GTT, FASTING	82950		
GTT, FASTING	GTT, FASTING	82947		
H&H	H&H	85014		
		85018		
H. SIMPLEX I	H. SIMPLEX I H. SIMPLEX II HALOPERIDOL	87140	.90	
H. SIMPLEX II	H. STMPLEX TT	87140	.90	
HALOPERIDOL	HALOPERIDOL	80299	.90	
HCG	HCG	84703		
BETA HCG		84702		
		83718	. 50	
HELPER T CELLS	HDL HELPER T CELLS	88180	.90	
HELPER I CELLIS	HELPER I CELLS	85048	. 90	
HEI DEB /CHDDDECC	HELPER/SUPPRESSOR RA			
HELPER/SUPPRESS	HELPER/SUPPRESSOR RA		.90	
	HELDED (GHDDDEGGOD III	86360	.90	
HELPER/SUPPRESS	HELPER/SUPPRESSOR T	85048	0.0	
		86360	.90	
HEMATOCRIT	HEMATOCRIT	85014		
	HEMOGLOBIN			
HEPATITIS A ANT	HEPATITIS A ANTIBODY	86296		
		86299	.90	
HEPATITIS B COR	HEPATITIS B CORE ANT HEPATITIS B PANEL	86289	.90	
HEPATITIS B PAN	HEPATITIS B PANEL			
		86287	.90	
		86289		
		86295	.90	
		86293	. 90	
HEPATITIS B SUR	HEPATITIS B SURFACE	86291	.90	
HEPATITIS B SUR	HEPATITIS B SURFACE	86287	.90	
HEPATITIS C	HEPATITIS C	86302		
HEPATITIS DIAGN	HEPATITIS DIAGNOSTIC HEPATITIS E ANTIBODY HEPATITIS E ANTIGEN	80059	.90	
HEPATITIS E ANT	HEPATITIS E ANTIBODY	86295	.90	
HEPATITIS E ANT	HEPATITIS E ANTIGEN	86293	.90	
	HETEROPHIL AB DIFFER			
HEXOSAMINIDASE	HEXOSAMINIDASE	84999	.90	
HGB ELECTROPHOR	HGB ELECTROPHORESIS	83020	.90	
HISTOPLASMA AB	HISTOPLASMA AB	86698	.90	
HISTOPLASMA COM	HISTOPLASMA COMPLEME		.90	
HISTOPLASMA PRE	HISTOPLASMA PRECIPIT		.90	
HIV SCREEN	HIV SCREEN	86701	.90	
HLA-ABC TYPING	HLA-ABC TYPING	86813	.90	
HOMOCYSTINE	HOMOCYSTINE	82131	.90	
HOMOVANILLIC AC	HOMOVANILLIC ACID	83150	.90	
HYDROXYPROLINE-	HYDROXYPROLINE-FREE		.90	
HYDROXYPROLINE-	HYDROXYPROLINE-TOTAL		.90	
IGA	IGA	82784	.90	
IGD	IGD	82784	.90	
IGG	IGG	82784	.90	
IGG SYNTHESIS R	IGG SYNTHESIS RATE	83883	.90	
		82784	.90	
IGM	IGM	82784	.90	
		-		
IMI+DES	IMI+DES	80101	.90	

i echnicai Manuai			Laboratory v 5.2/PCC	LIF
IMIPRAMINE &	DE IMIPRAMINE & EX- IMMUNE COMPL ENS IMMUNOGLOBUL EP INDIA INK PR BA INFLUENZA A, ENG INFLUENZA A, ENI INFLUENZA B, INFLUENZA C INFLUENZA TY INSULIN BOD INSULIN ANTI ING INSULIN BIND ING INSULIN BIND CTO INTRINSIC FA GAN IODINE, INOR IODINE, TOTA IUM IONIZED CALC IRON IRON PROFILE	DESIPRA 80101	.90	\Box
IMMUNE COMPLE	EX- IMMUNE COMPL	EX-C1Q 86332	.90	
IMMUNOGLOBULI	INS IMMUNOGLOBUL	INS 82784	.90	
INDIA INK PRE	EP INDIA INK PR	EP 87210		
INFLUENZA A,	BA INFLUENZA A,	BANGKOK 86710	.90	
INFLUENZA A, E	ENG INFLUENZA A,	ENGLAND 86710	.90	
INFLUENZA A, E	PHI INFLUENZA A,	PHILLIPI 86710	.90	
INFLUENZA B,S	SIN INFLUENZA B,	SINGAPOR 86710	.90	
INFLUENZA C	INFLUENZA C	86710	.90	
INFLUENZA TYE	PE INFLUENZA TY	PE A (TI 86710	.90	
INFLUENZA TYE	PE INFLUENZA TY	PE B (TI 86710	.90	
INSULIN	INSULIN	83525	.90	
INSULIN ANTIE	BOD INSULIN ANTI	BODIES 86337	.90	
INSULIN BINDI	ING INSULIN BIND	ING 86337	.90	
INTRINSIC FAC	CTO INTRINSIC FA	CTOR AB 86340	.90	
IODINE, INORG	GAN IODINE, INOR	GANIC 82491	.90	
IODINE, TOTAL	IODINE, TOTA	L 82491	.90	
IONIZED CALCI	IUM IONIZED CALC	IUM 82330	.90	
IRON	IRON	83540		
IRON STUDIES	IRON PROFILE	83540	.90	
		83550	.90	
IRON SATURATI	ION IRON SATURAT	ION 83550	.90	
ISOPROPANOL	ISOPROPANOL	84448	.90	
KETONES	KETONES	82010	.90	
KOH FUNGAL PF	REP KOH FUNGAL P	REP 87220		
LACTIC ACID	LACTIC ACID	83605		
LDH	LDH	83615		
LDL CHOLESTER	ION IRON SATURAT ISOPROPANOL KETONES REP KOH FUNGAL P LACTIC ACID LDH ROL LDL CHOLESTE LE PREP LEAD ING LECITHIN/SPH B LEGIONELLA A	ROL 83721	.90	
LE	LE PREP	85544		
LEAD	LEAD	83655	.90	
LECITHIN/SPHI	ING LECITHIN/SPH	INGOMYEL 83661	.90	
LEGIONELLA AE	B LEGIONELLA A	B 86713	.90	
LEPTOSPIRA AC	GGL LEPTOSPIRA A	GGLT 86720	.90	
LEUKOCYTE ALK	K P LEUKOCYTE AL	K PHOS S 85540		
LH	LETTOSTIKA A LEUKOCYTE AL LH LIDOCAINE LIPASE LIPID PROFIL	83002	.90	
LIDOCAINE	LIDOCAINE	80176	.90	
LIPASE	LIPASE	83690		
LIPID PROFILE	E LIPID PROFIL	E 80061		
	ITA LIPIDS, QUAL L LIPIDS, TOTA	83721		
LIPIDS, QUALI	ITA LIPIDS, QUAL	ITATIVE 82705	.90	
LIPIDS, TOTAL	L LIPIDS, TOTA	L 80061	.90	
LITHIUM	LITHIUM	80178		
LIVER FUNCTION	ON LIVER FUNCTI			
		84075		
		84450		
		84460		
		82977		
LSD	LSD	80101	.90	
LYSOZYME	LYSOZYME	85549	.90	
ELECTROLYTES		80004		
MAGNESIUM	MAGNESIUM	83735	• •	
MAPROTILINE-I			.90	
MEASLES-RUBEC			.90	
MEPERIDINE	MEPERIDINE	83925	.90	
MEPHOBARBITAI			.90	
MERCURY	MERCURY	83825	.90	
METANEPHRINES	-		.90	
METHADONE	METHADONE	83840	.90	
METHOTREXATE			.90	
METHYLMALONIC	C A METHYLMALONI	C ACID 82131	.90	

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Dolatory V 5.2/FCC Link			160	Jillicai Mailud
MHA-TP	MHA-TP	86781	.90	
MICROHEMATOCRIT	MICROHEMATOCRIT	85013		
MONO TEST HETEROPHILE MORPHINE	MONO TEST MONO TEST MORPHINE	86403		
HETEROPHILE	MONO TEST	86308	.90	
MORPHINE	MORPHINE	80101	.90	
MS AFP		82105		
MUCOPOLYSACCHAR			.90	
MUMPS	MIMPS	86735	.90	
MUMPS SOLUBLE	MUMPS MUMPS SOLUBLE MUMPS VIRAL MYCOLOGY CULTURE	86735	.90	
MUMPS VIRAL	MIMPS VIRAL	86735	.90	
MYCOLOGY CULTUR	MYCOLOGY CULTURE		. , ,	
MYELIN BASIC PR			.90	
MYOGLOBIN	MYOCIODIN	83874	.90	
PRIMIDONE	MYOGLOBIN MYSOLINE	80188	.90	
ALONATAL DILIDII	MIDOUTHE	00100		
NEUNAIAL BILIRU	NEONATAL BILIRUBIN NEWBORN METABOLIC SC	82251	0.0	
IEMBORN METABOL	NEWBORN METABOLIC SC		.90	
		83020	.90	
		82776	.90	
		84437	.90	
	NICKEL NICOTINE NORTRIPTYLINE OCCULT BLOOD OPIATE SCREEN OPIATES	82128	.90	
IICKEL	NICKEL	83885	.90	
IICOTINE	NICOTINE	83520	.90	
NORTRIPTYLINE	NORTRIPTYLINE	80182	.90	
FECAL OCCULT BL	OCCULT BLOOD	82270		
OPTATE SCREEN	OPTATE SCREEN	80101	.90	
PIATES	OPIATES	80102	.90	
SMOLALITY	OSMOLARITY	83930	.90	
VA & PARASITES		87177		
XALATE	OXALATE	83945	.90	
XYGEN SATURATI		82810	. 90	
ALGEN SAIURAII	PARAINFLUENZA 1		0.0	
			.90	
		86790	.90	
ARAINFLUENZA 3	PARAINFLUENZA 3	86790	.90	
ARTIAL THROMBO	PARTIAL THROMBOPLAST	85730		
CO2	PCO2	82803		
ENTOBARBITAL		82205	.90	
PEPSINOGEN	PEPSINOGEN	83519	.90	
EPSINOGEN 1	PEPSINOGEN 1	83519	.90	
PH	PH	82800		
PHENOBARBITAL	PHENOBARBITAL	80184		
PHENOL	PHENOL	82491	.90	
PHENOTHIAZINE	PHENOTHIAZINE	80101	.90	
PHENYLALANINE	PHENYLALANINE	84030	.90	
PHOSPHOLIPIDS	PHOSPHOLIPIDS	84311	.90	
PINWORM EXAM	PINWORM EXAM	87208		
PLATELET AB	PLATELET AB	86022		
PLATELET COUNT	PLATELET COUNT	85595		
PLT (ESTM)	PLT (ESTM)	85585		
PO2	PO2	82803		
202 204	PO2 PO4	84100		
			0.0	
POLIO VIRUS 1	POLIO VIRUS 1	86658	.90	
POLIO VIRUS 2	POLIO VIRUS 2	86658	.90	
POLIO VIRUS 3	POLIO VIRUS 3	86658	.90	
POTASSIUM	POTASSIUM	84132		
PREALBUMIN	PREALBUMIN	84134	.90	
JRINE PREGNANCY	PREGNANCY TEST	81025		
PREGNANEDIOL	PREGNANEDIOL	84135	.90	
PROCAINAMIDE	PROCAINAMIDE	80192		
		0 4 5 4 5	0.0	
PROLACTIN	PROLACTIN	84146	.90	1

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PROSTATE SPECIF	PROSTATE SPECIFIC AN	84153	.90	
PROTEIN	PROTEIN, TOTAL PROTHROMBIN TIME PROTIME1	84155		
PT PATIENT	PROTHROMBIN TIME	85610		
PROTIME PROTIME2	PROTIME1 PROTIME2	85610		
PROTIME2	PROTIME2	85610		
PROTRIPTYLINE	PROTRIPTYLINE			
PT WITH MIX	PT WITH MIX	85611		
PTH (C-TERMINAL	PTH (C-TERMINAL) PTH (INTACT) Q-FEVER (ACUTE) TITE	83970	.90	
PTH (INTACT)	PTH (INTACT)	83970	.90	
Q-FEVER (ACUTE)	Q-FEVER (ACUTE) TITE	86638	.90	
QUINIDINE		80194		
RA PRECIPITIN A	RA PRECIPITIN AB	86431	.90	
RBC	RBC	85041		
RBC RENIN	RBC RENIN	84244	.90	
RESP SYNCITIAL	RESP SYNCTIAL VIRUS	86756	.90	
RETICULOCYTES	RETICULOCYTES	85044		
	RHEUMATOID FACTOR	86430		
		06500		
RUBELLA	RUBELLA SCREEN	86592 86762		
RUBELLA TITER	RUBELLA TITER	86762	. 90	
RUBEOLA TITER	RUBELLA SCREEN RUBELLA TITER RUBEOLA	86765	90	
RPR RUBELLA RUBELLA TITER RUBEOLA TITER SALICYLATE	SALTCYLATE	80196	. 50	
SCIEDODEDMA AB		86235	.90	
ECD ECOPERMA AB	SCHENODERMA AB	85651	. 90	
CEI ENTIM	SED RAIE	84255		
SETENTOM	SELENIUM SEMEN ANALYSIS	04233	.90	
	SEMEN ANALISIS	09340	.90	
SGOT	SGOT	84450		
SGPT SICKLE CELL PRE SODIUM	SGPT	84460 85660		
SICKLE CELL PRE	SICKLE CELL PREP	85660		
		84295		
SPECIFIC GRAVIT	SPECIFIC GRAVITY			
SPERM COUNT	SPERM COUNT STOOL CULTURE STREP B SCREEN STREP SCREEN	89310		
STOOL CULTURE	STOOL CULTURE STREP B SCREEN STREP SCREEN	87045		
STREP B SCREEN	STREP B SCREEN	86588	.90	
STREP A SCREEN	STREP SCREEN	86588		
BETA STREP GROU	STREP SCREEN			
STREPTOZYME	STREPTOZYME	86317	.90	
T LYMPHOCYTES	T LYMPHOCYTES	86359	.90	
T-4 BINDING GLO	T-4 BINDING GLOBULIN	84442	.90	
T3 UPTAKE	T LYMPHOCYTES T-4 BINDING GLOBULIN T3 UPTAKE	84479		
TEGRETOL	TEGRETOL			
TEICHOIC ACID	TEICHOIC ACID AB	86331	.90	
TESTOSTERONE	TESTOSTERONE	84403	.90	
THALLIUM	THALLIUM	82190	.90	
THEOPHYLLINE	THEOPHYLLINE	80198		
THIOCYANATE	THIOCYANATE	84430	.90	
THIORIDAZINE	THIORIDAZINE	84022	.90	
THIORIDAZINE-ME	THIORIDAZINE-MELLARI	84022	.90	
THROAT CULTURE	THROAT CULTURE	87060	. 50	
THROMBIN TIME	THROMBIN TIME	85670		
THYROGLOBULIN	THYROGLOBULIN	84432	.90	
THYROID PROFILE	THYROID GROUP	80092	.90	
muun outtun	THE OWNER	84480	.90	
THYROXINE	THYROXINE	84436		
TOBRAMYCIN	TOBRAMYCIN	80200		
TOTAL IRON BIND	TOTAL IRON BINDING C	83550		
TOXOPLASMA	TOXOPLASMA	86777	_	
TRANSFERRIN	TRANSFERRIN	84466	.90	
TRAZODONE	TRAZODONE	80154	.90	
TRIGLYCERIDE	TRIGLYCERIDE	84478		

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	TRIIODOTHYRONIN	TRIIODOTHYRONINE	84480		
	TRYPSIN	TRYPSIN	83519	.90	
	TSH	TSH	84443		
	TULAREMIA AGGLU			.90	
	TYPHUS AB TITER		86255	.90	
	UREA NITROGEN	UREA NITROGEN	84520		
	URIC ACID	URIC ACID	84550		
	URINALYSIS	URINALYSIS	81001		
	URINE 5HIAA	URINE 5HIAA	83497	.90	
	URINE CREATININ	URINE CREATININE	82570		
	URINE CULTURE	URINE CULTURE	87086		
	DIPSTICK UA	URINE DIPSTICK	81003		
	URINE DRUG SCRE	URINE DRUG SCREEN	80100	.90	
	URINE VOLUME ME	URINE VOLUME	81050		
	VALPROIC ACID	VALPROIC ACID	80164		
	VANCOMYCIN	VANCOMYCIN	80202		
	VDRL	VDRL	86592		
	VIRAL CULTURE	VIRAL CULTURE	87252	.90	
	VITAMIN B-1	VITAMIN B-1	84425	.90	
	VITAMIN B12	VITAMIN B-12	82607		
	VITAMIN B-2	VITAMIN B-2	84252	.90	
	VITAMIN B-6	VITAMIN B-6	84207	.90	
	VITAMIN C	VITAMIN C	82180	.90	
	VITAMIN E	VITAMIN E	84446		
	VMA	VMA	84585	.90	
	WBC	WBC	85048		
	WHOLE BLOOD GLU	WHOLE BLOOD GLUCOSE	82962		
	WINTROBE ESR &	WINTROBE ESR & CBC	85027		
			85651		
	WINTROBE	WINTROBE*	85651		
	XYLOSE ABSORPTI			.90	
	ZINC	ZINC	84630	.90	

Appendix B: IHS Lab Transaction Log Field Definitions

BLRTXLOG (9009022)

Below is a typical transaction (a chloride ordered as part of a test panel – electrolytes) and an explanation of each of the fields displayed.

Note: Other fields may be displayed depending upon the kind of test being processed. For a complete listing of the fields in the BLR Transaction Log, please review the data dictionary for file 9009022.

```
IHS LAB TRANSACTION LOG LIST
                                                    SEP 30,1997 16:20
PAGE 1
SEQUENCE NUMBER: 35
                                         LRFILE: 2
 LRDFN: 5
                                          PATIENT POINTER VALUE: 1
 PANEL/TEST POINTER: CHLORIDE
                                          LAB MODULE: GENERAL
                         I/O CATEGORY: IN PATIENT
STATUS FLAG: ACCESSIONED
 DUZ(2): 4585
 PARENT POINTER: 32
  ENTRY DATE/TIME: SEP 29, 1997@13:05:12
  ASSOCIATED V FILE: V LAB
                                           IEN OF V FILE ENTRY: 70054
  CLINIC STOP CODE POINTER: PEDIATRIC CPT LAB CODE POINTER: ELECTROLYTES
  ORDER DATE: SEP 29, 1997@13:05:12 ORDER SEQUENCE NUMBER: 5
  ORDER NUMBER: 370
                                     ORDERING PROVIDER POINTER: BRIO, ALINA
  ORDERING PROVIDER NAME: BRIO, ALINA
  ORDERING LOCATION POINTER: SMITH PEDIATRIC
 ORDERING LOCATION NAME: SP COLLECTION DATE/TIME: SEP 29, 1997
ACCESSION NUMBER: CH 0929 5 UNITS: mEq/L
SITE/SPECIMEN POINTER: BLOOD VERIFIER POINTER: EVANS,F.J.
  VERIFIER NAME: EVANS, F.J.
```

- .01 SEQUENCE NUMBER: A unique number assigned by the system to each panel and individual test at the time of order in the Laboratory package. This number is the same as the internal entry number for each entry.
- .02 LRFILE: The number of the file that the Lab Data points to; e.g., File 2 VA Patient.
- .03 LRDFN: The internal entry number of the lab data global.
- .04 PATIENT POINTER VALUE: The IEN of the patient in File 2, VA Patient.
- .05 PATIENT NAME: The patient's name (not displayed in the example).
- .06 PANEL/TEST POINTER: This is a pointer to the test in the Laboratory Test file (60).
- .07 PANEL/TEST NAME: This is the name of the test in the Laboratory Test file (60) (not displayed in the example).

.08 LAB MODULE: Reference to the subscript defined for this test in Laboratory Test file

(60) 'CH' FOR GENERAL;

'MI' FOR MICROBIOLOGY;

'BB' FOR BLOOD BANK;

'AU' FOR AUTOPSY:

'CY' FOR CYTOPATHOLOGY;

'SP' FOR SURGICAL PATHOLOGY:

'OT' FOR OTHER

- .09 DUZ(2): The institution where the ordering person is logged in; e.g., 4585/Sells, 4587/San Xavier, 1546/AIH, etc.
- .1 I/O CATEGORY: Identification of the patient location: 'I' for Inpatient, 'A' for Outpatient
- 101 PARENT POINTER: This is a pointer to the transaction sequence number of the panel test actually ordered; in this case, electrolytes.
- 102 STATUS FLAG: Defines current status of test in transaction:

'O' FOR ORDERED;

'A' FOR ACCESSIONED;

'R' FOR RESULTED;

'M' FOR MODIFIED;

'D' FOR DELETED;

'Z' FOR UNKNOWN

- 103 ENTRY DATE/TIME: Date and time entry is made in the transaction log.
- ASSOCIATED V FILE: Pointer to PCC file where lab data will be stored—V LAB, V MICRO, or V BLOOD BANK.
- 105 IEN OF V FILE ENTRY: The internal entry number of this lab test in the associated V file.
- 106 PCC ERROR FLAG: Reason for rejection of a transaction passing to the PCC.
- BILLABLE ITEM: This field determines if this entry is a billable event. 1 stands for yes; 0 stands for no (not displayed in the example).
- 108 LAB TEST LIST COST: The cost to the laboratory of performing this test. It must be a number between 0 and 9999 with 2 decimal digits. (Not displayed in the example since the parent, electrolytes, is the billable test).
- 109 CLINIC STOP NAME: Name of the Clinic Stop (not displayed in the example).
- 110 CPT LAB CODE POINTER: Pointer to the IHS Lab CPT Code file. (In this example, the parent, electrolytes, is the billable event.)
- 111 CPT CODE: CPT Code of test listed in the transaction. Not displayed in this case because the parent, electrolytes, is the billable test.
- ENCOUNTER PROVIDER POINTER: Pointer to entry in the New Person file (#200) for the ordering provider (not displayed in this example).
- 113 ENCOUNTER PROVIDER NAME: Name of the ordering provider (not displayed in this example).
- SOURCE OF DATA INPUT: This field holds a flag to tell the user if data came from the IHS Laboratory package or from an external source. If data is from the Laboratory package, the value will be "L" (not displayed in this transaction).

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- BILLING CPT STRING: The string of CPT codes, modifiers, and qualifiers that are associated with billing for this test (not displayed in this transaction since the billing is associated with the parent test, electrolytes).
- ORDER DATE: The date and time the order was entered into the Laboratory package. It does not necessarily match the entry date and time (field 103).
- ORDER SEQUENCE NUMBER: The internal entry number of the order for this test in File 69 of the Laboratory package.
- ORDER NUMBER: The order number assigned by the Laboratory package at the time this test was ordered.
- ORDERING PROVIDER POINTER: A pointer to the New Person file (#200) for the provider who ordered the laboratory test.
- ORDERING PROVIDER NAME: The name of the ordering provider.
- ORDERING LOCATION POINTER: A pointer to the Hospital Location file (#44).
- 1107 ORDERING LOCATION NAME: The abbreviation for the ordering location.
- 1201 COLLECTION DATE/TIME: The date and time entered into the Laboratory package for the date and time the specimen was collected.
- 1202 ACCESSION NUMBER: The accession number assigned to this specimen by the Laboratory package.
- ORGANISM: If this is a Microbiology specimen, a pointer to the Etiology Field file (#61.2) for any organisms (bacteria, fungi, parasites, viruses) identified.
- ORGANISM NAME: If this is a Microbiology specimen, the name of the organism identified.
- ANTIBIOTIC: If this is a Microbiology specimen, a pointer to the Antimicrobial Susceptibility file (#62.06) for any antibiotics in the template defined for an organism.
- ANTIBIOTIC NAME: If this is a Microbiology specimen, the name of the antibiotic that is being reported.
- 1305 STAGE COUNTER: If this is an order for Ova and Parasites, a number that identifies how many stages of the organism are identified.
- STAGE NAME: If this is an order for Ova and Parasites, the stage of the parasite; e.g., trophozoite, cyst, etc.
- BB TEST: If this is a Blood Bank test, a pointer to the test in the Laboratory Test file (#60).
- BB TEST NAME: The name of the Blood Bank test as defined in the Laboratory Test file (#60).
- ANTIBODY: If this is a Blood Bank test with a positive Coombs, direct or indirect test, a pointer to an antibody in the Function Field file (#61.3).
- 1404 ANTIBODY NAME: The name of the antibody as defined in the Function Field file (#61.3).
- 2001 RESULT: The result of the test entered into the Laboratory package.
- 2002 RESULT N/A FLAG: The flag of H, L, or * set by the Laboratory package to identify a High, Low, or Critical laboratory result.
- 2003 UNITS: The units defined in the Laboratory Test file (#60) for reporting the results for the laboratory test in this transaction.
- 2004 SITE/SPECIMEN POINTER: A pointer to the Topography file (#61) for the specimen defined at the time of order for the test in this transaction.

- 2005 SITE/SPECIMEN NAME: The name of the site/specimen for the test in this transaction.
- VERIFIER POINTER: A pointer to the individual in the New Person file (#200) who verified the results of this test.
- VERIFIER NAME: The name of the person who verified the results of this test.
- 2007 REFERENCE LOW: The lower limit for the normal range for the test in this transaction as defined in the Laboratory Test file (#60).
- 2009 REFERENCE HIGH: The upper limit of the normal range for the test in this transaction as defined in the Laboratory Test file (#60).
- 3001 COMMENTS: A multiple field for comment type entries in the Laboratory package, primarily Microbiology comments related to smear/prep type results.

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