The Arizona Border Study

An Extension of the
Arizona National Human Exposure Assessment Survey (NHEXAS)Study
Sponsored by the Environmental Health Workgroup of the Border XXI Program

Quality Systems and Implementation Plan for Human Exposure Assessment

The University of Arizona
Tucson, Arizona 85721

Cooperative Agreement CR 824719

Standard Operating Procedure **SOP-UA-D-28.0**

Title: Tracking System

Source: The University of Arizona

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Form TP-1

Tracking System

1.0 Purpose and Applicability

The NHEXAS Arizona project designed a tracking system that tracks what occurs to a sample and provides the status of that sample at any given time. In essence, NHEXAS provides an electronic chain of custody record for each sample as it moves though the project. This is achieved through recording all actions of importance that occur to every physical sample including the date and the technician who performed the action. The Tracking System (TS) then can be considered a series of actions or "events" consisting of item, action, technician identification number and date arranged in chronological order. This program can be expanded to track other information and will be used in the Border Study. It may be modified in the future for use in other Health and Environment Projects.

2.0 Definitions

2.1 BORDER STUDY: An alias for "Total Human Exposure Arizona: A comparison of the Border Communities and the State" conducted in Arizona by the University of Arizona/Battelle/Illinois Institute of Technology consortium.

2.2 HEALTH AND ENVIRONMENT PROJECTS (or H & E) : An umbrella title for all projects funded to M. D. Lebowitz and/or M. K. O'Rourke (or their designees) which examine purported or real relationships among environmental factors and any aspect of human health.

2.3 HRP SITE: The **H**ealth **R**elated **P**rofessions building, located at 1435 North Fremont Avenue; Tucson, AZ 85719. This is an annex of the Arizona Prevention Center and the primary site of NHEXAS Arizona.

2.4 NHEXAS Arizona: Acronym for **N**ational **H**uman **EX**posure **A**ssessment **S**urvey, a research project conducted in Arizona by the University of Arizona/Battelle/Illinois Institute of Technology Consortium.

2.6 TS: Acronym for the **T**racking **S**ystem, a program written in FoxPro 2.6 for the express purpose of maintaining an electronic custody record for samples used in the NHEXAS project (see overviews Figures 2 and 3).

3.0 References

Microsoft FoxPro Professional Edition version 2.6, Copyright 1989-1993 Microsoft Corporation.

4.0 Discussion

The Tracking System (TS) is a modular program written and compiled in FoxPro for DOS version 2.6. It performs three main functions: 1) Sample ID/Bar Code Generation, 2) Sample Tracking, 3) Report Generation.

The TS uses a seven-digit non-consecutive non-repeating numbering scheme to identify all samples. Authorized users may generate new Sample ID's and then print their respective bar codes.

The TS consists of several modular procedures that record the progress of samples as they pass through the project. There are three main events that occur to a sample: 1) Initialization/Assignment: This is the beginning of activity for a sample. The sample type and ID number are recorded and the TS "tracks" the sample. 2) Lab Processing/Exposure: This stage involves actual use of the sample either by analyzing it, or using it in the field. 3) Shipment to external lab/storage: Certain samples are shipped to outside labs for analysis; others are kept, analyzed and stored in-house.

At no time is any information regarding a sample removed from the TS by users. Every event that is recorded can be updated by recording a more recent event. The status of a sample is determined by looking at the event with the most current time and date. The process of correcting mistakes is as follows: 1) the person requesting the change must submit the request in writing to the Tracking System Administrator (TSA), 2) the TSA keeps the request in a file located in the Data Coordinator's office and checks the validity of the request, 3) if the request is invalid then the TSA confers with the person who asked for the change and reconciles any problems, 4) if the request is valid then the TSA makes the change.

Report generation is the third component of the TS. There are currently seven reports that can be run. Additional report generation programs can be written as needed. Each report lists the known information about a given sample or household and can be printed if so desired. For example, the Sample Status Report asks the user to enter a specific sample ID. All events relating to that sample are then displayed on the screen. A print-out also can be made.

A discussion of each module that makes up the TS is provided in Appendix A.

5.0 Responsibilities

The Project Data Coordinator is responsible for writing/maintaining the TS, and defining the databases. Any changes will be made by the TS Administrator (see example Figure 1).

6.0 Materials and Reagents

6.1 Networked Computer Workstation, 80286 processor, Hercules monochrome monitor.

6.2 Light-Pen Bar Code reader

6.3 Microsoft FoxPro Professional Edition version 2.6, Copyright 1989-1993 Microsoft Corporation.

7.0 Procedures

7.1 *Generation of Bar Codes*

7.1.1 When a user wishes to generate bar codes there are several steps that must be followed.
7.1.2 First, turn on the computer.
7.1.3 When the login prompt appears type in the user name and password.
7.1.4 Next type "TRACKIT".
7.1.5 The initial TS screen appears.
7.1.6 Verify the Tech ID or correct it then press enter.
7.1.7 The TS menu is now on screen.
7.1.8 Find the menu option that say "Generate Sample ID's" and press the appropriate arrow key to move the highlight bar to it.
7.1.9 Press the return key to select it.
7.1.10 Verify that you are in the correct area by reading the description and then press the return key.
7.1.11 The menu of all possible sample types appears.
7.1.12 Find the desired sample type and press the appropriate arrow key to move the highlight bar to your choice.
7.1.13 If you do not see the desired sample type you will be able to create new types when that option is completed.
7.1.14 The program next asks you to verify that you have selected the correct sample type.

7.1.15 If you have, press return or the letter "y".
7.1.16 The Program displays the last number of the last Sample ID generated and asks for the number of new sample ID's you wish to create.
7.1.17 Enter "0" to exit or the number you need. Finally it verifies the number of new sample ID's and asks to begin or not.
7.1.18 Press return or the letter "Y" to begin generating the new sample ID's.
7.1.19 At this point you are returned to the main menu.
7.1.20 Now find the menu option that says "Write SAMPID's for Bar Code".
7.1.21 Move the highlight bar to select this option and press return.
7.1.22 The computer now verifies that you have chosen the correct menu option and asks if you want to continue.
7.1.23 Press enter.
7.1.24 Locate the sample type that you just created and use the arrow keys to highlight it and press enter.
7.1.25 The computer will ask you to verify the sample type.
7.1.26 If it is correct press return.
7.1.27 The display will show the range of sample ID's that have not been printed and their total number.
7.1.28 You are then prompted with the file name "R:\SAMPID.BAR".
7.1.29 This is a network file where the sample ID's will be written and is readable by the BAR-ONE barcode printing program.
7.1.30 Pressing return accepts this filename.
7.1.31 Then the number of Sample ID's per row and the number of rows per Sample ID is displayed.
7.1.32 The defaults are 4 and 1 respectively.
7.1.33 Press return to accept these values (they can be changed depending if you are using a different type of label stock).
7.1.34 Finally you are asked if you are sure you want to proceed.
7.1.35 Pressing return begins writing to the file.

7.2 *Initializing Samples in the TS*

7.2.1 The life cycle of the typical sample (i.e. 90% of all samples) begins after the Sample ID has been generated.
7.2.2 The next step is initialization (Track008).
7.2.3 After selecting "Initial Sample Login" the user is prompted to enter the desired Sample ID.
7.2.4 The TS checks to see if the sample has already been logged in.
7.2.5 If it has the user is warned that they are about to overwrite the existing information.

7.2.6 Typically, the sample has not been logged in and the user is asked if they want to print out a chain of custody for this sample.
7.2.7 Answering yes will print out a chain of custody record when the user exits the module.
7.2.8 Next the Initial Sample Login screen is displayed.
7.2.9 The Sample ID appears along with a verbal description of the type, today's date as the "Date Received", Shipment number along with a shipment date, source (EPA, FDA, etc.) i.e. outside lab destination, Lot Number, Usage type, and whether or not it is a valid sample.
7.2.10 All of these fields are user modifiable, or the user can accept the defaults by simply pressing enter.

7.3 *Household Assignment of Samples*
7.3.1 Once a sample is initialized it can then be assigned to a Household.
7.3.2 This is done in Track022, Sample Assignment.
7.3.3 The user is asked to enter the HHID number of the Household and the Family Schism to which the sample will be assigned.
7.3.4 The TS checks that this is a valid HHID.
7.3.5 Then the TS asks for the Sample ID.
7.3.6 It will then tell the user the total number of Sample ID's that have been assigned to this Household and asks if they still wish to assign another.
7.3.7 Then it asks one final time if this Sample ID should be assigned to this HHID.
7.3.8 Pressing enter will complete the assignment and the user can enter another Sample ID for this same HHID or enter a new HHID.

7.4 *Sample Disposition: Post Field Exposure*
7.4.1 Samples are now ready to go into the field for exposure.
7.4.2 Once they have returned from the field they can be logged in by running the Post-Field Sample Login procedure.
7.4.3 First the user enters the HHID that all samples will be logged in to.
7.4.4 Then they enter the Sample ID.
7.4.5 A series of questions regarding the exposure of the Sample ID are asked: 1)Was the integrity of the Sample compromised?, 2)Was the Sample exposed?, 3)Enter Stage Level: (Default is 1), 4)Is this a collapsed sampling?
7.4.6 They then have to verify the HHID in that the Sample was exposed, the IRN and the exposure date.

7.4.7 Finally, a statement summarizing the questions and the responses that the user gave is displayed and the user must accept this statement as true otherwise all answers are discarded.

7.4.8 Answering "Yes" will write the information to the TS and the sample may be automatically transferred to the lab.

7.5 *Transfer of Samples to UA Lab*

7.5.1 Some samples require pre-field or post-field processing by the Lab.

7.5.2 The TS is aware of which samples they are and will not let the next event occur until the lab processing has been done and recorded.

7.5.3 For example, Air Sentinel (AS1) filters are required to be weighed prior to being used in the field.

7.5.4 The Materials Tech transfers custody of the AS1 to the Lab.

7.5.5 The Lab weighs the sample and then transfers custody back to the Materials Tech.

7.5.6 This sample also must be weighed when it returns from the field. Chain of custody is handled by the "Post Field Lab Processing" module.

7.5.7 Again, the Materials Tech transfers custody to the Lab for weighing.

7.5.8 Once the Lab has completed the weighing procedure the sample is returned to the Materials Tech and the appropriate entry is made in the "Post-Field Lab Processing" module.

7.6 *Sample Aliquot Module*

7.6.1 Certain samples, such as the Floor Dust and Soil Samples, are divided into portions at the UA Lab.

7.6.2 This process is know as aliquotting.

7.6.3 The user first logs in to the TS and selects the "Aliquot samples" menu item.

7.6.4 The TS then confirms that you are in the correct module and asks for the Parent Sample ID (i.e. the sample to which the aliquots will be assigned).

7.6.5 Then the user may enter as many aliquots as desired.

7.6.6 Each aliquot entered will be assigned to that Parent Sample ID, or until the Parent ID is changed.

7.7 *Sample Shipment*

7.7.1 The final destination for all samples is predetermined by the type of sample.

7.7.2 Food samples, for example, are shipped to the Food and Drug Administration.

7.7.3 Soil samples are kept and stored at 1435 N. Fremont in Tucson, AZ.

7.7.4 The module that records shipment of samples is called the "Select and ship samples to lab" module.
7.7.5 When this module is selected a menu appears with the various sample destinations: Battelle, FDA, EPA, and the Centers for Disease Control.
7.7.6 Once the appropriate location has been selected the user can either enter the samples to be shipped or they can select them from a list provided by the TS.
7.7.7 This contains samples that have completed the necessary steps to be ready for shipment.
7.7.8 If the user elects to enter the Sample ID's manually then they are prompted with the standard Sample ID-Entry dialogue.
7.7.9 Each sample entered appears on the screen beginning with the upper left most corner and continuing down in columns until the screen is full.
7.7.10 If they choose to select samples from the menu they need only highlight the sample with the arrow keys and press return.
7.7.11 Each selected sample will remain highlighted, un-selected samples will remain dimmed.
7.7.12 When the user is finished selecting or entering samples they next will press escape to take them to the previous menu.
7.7.13 Then they will select "Ship Samples".
7.7.14 The TS will display today's date as the shipment date; this can be changed as necessary.
7.7.15 The TS will automatically begin printing a copy of the samples that were selected to be shipped; this printout becomes the packing list for the shipment.
7.7.16 This ends the journey of the sample.

7.8 *Quality Control*

The Tracking System (TS) utilizes several quality assurance procedures that ensure that the data and, therefore, the information contained within it are both accurate and precise.

These procedures consist of, but are not limited to:

7.8.1 Sample ID's are verified that they exist in the TS by the TS every time the user enters them. This is ensured throughout by the use of a single entry procedure found in Track001.

7.8.2 Household ID numbers are also verified by the TS every time they are entered.

7.8.3 Any single event cannot happen to a given sample more than once. For example, a sample cannot be logged in from the field twice.

7.8.4 Any module that requires a prerequisite event checks for that event and subsequent events cannot happen without completion of the previous event (e.g. a sample cannot be analyzed until it is collected or exposed).

7.8.5 Shipment, Receipt, and Analysis logs are cross checked between Arizona and Battelle.

7.8.5.1 Missing.prg and misship.prg programs were written to check for missing events. These programs are run once every month. The printed results are kept in a notebook in the Data Coordinator's office.

7.8.5.2 If any event is found to be missing then the Data Coordinator will confer with the Field Coordinator and manually input the missing event.

7.8.6 *Security Control/Password Protection*

7.8.6.1 The TS has double-layer password protection. Users must first have a valid NHEXAS account to gain access to the network. Then they must have a valid Tech ID and password to access the TS. The TS uses a simple algorithm to encrypt each password thus ensuring that no one, including the TS Administrator, will see another person's password.

7.8.6.2 All Tech ID's are assigned in the "User Account Maintenance" module by the TS Administrator. Please see section 7.9 for an explanation of how this is done.

7.8.6.3 Every module has a security level based on a users need to use a module. Without a need to use a specific module that module will not appear on the user's screen. The security level for each user is set by the Data Coordinator.

7.8.6.4 The TS administrator is notified of run-time errors via e-mail describing the error, who was using the system, and the line number in the program.

7.8.6.5 Users are given three attempts to enter a valid password. If all three attempts fail then all terminals are alerted via a pop-up message on their screens.

7.8.7 A packet containing test data has been created with an HHID of 515245. This packet contains each form type in the project. Each form type is sent through the Data Section once every ten (10) batches. A notebook documenting this is in the Data Coordinator's office.

7.9 *Adding New Technician ID's*

7.9.1 The user may display a list of users and their Tech ID's by entering a "1" at the prompt.

7.9.2 You may then select the next available Tech ID number. Then enter the name of the new user.

7.9.3 Select the proper security level (1-5, 1 being the highest, 5 being the lowest) by placing the letter "Y" in the box next to the number.

7.9.4 Field members' security is placed in the "Field" column, Lab members in the "Lab" column and Data members in the "Data" column.

8.0 Records

Inclusions:

Figure 1. Sample Change to Tracking System Request
Figure 2. Tracking System Overview
Figure 3. Tracking System Modular Relationships
Appendix A. Tracking System

Figure 1. Sample Change to Tracking System Request

Figure 2. Tracking System Overview

Figure 3. Tracking System Modular Relationships

Appendix A. Tracking System

The Tracking System (TS) consists of many modules that work in concert to manage the chain of custody for every sample that is used by the field teams. Some modules do not have an independent purpose. They require other modules to use them as is the case in Track001. Track001 is composed entirely of separate procedures. Each procedure is called by another procedure within Track001 or somewhere else in the TS. These procedures are called "reusable code" in that any module may make use of them. The following describes each module and how it interacts with every other module to form the TS. Each module is described below and module relationships are described in figures 2 and 3.

Tracking.prg

Description:

Main entry point for the tracking system. Tracking.prg defines the working environment. It asks for user name and password, and sets security level. It notifies other users if unauthorized attempt to gain access or failed password. Once identity is verified, calls appropriate menu for that user/function. The system allows three attempts to get the password right for the given Tech ID. If the user can't get it right in three tries, the entire network is notified of the failure, and the user is dumped back to the operating system.

Track001.prg

Description: Procedure file with common, top level procedures.

The following procedures and functions are contained within Track001.prg:

Procedure: LITEBAR

Purpose: Procedure from dBASE III+ Programmers Reference Guide. It is a procedure to display a light-bar menu for up to 9 menu choices. Choices need to be stored as "Opt" + subscript: Opt1, Opt2, ... Opt9. Currently this procedure is not being used within the TS.

Procedure: RANDNUM
Purpose: Used to generate random numbers for use in things like password encryption and temporary file creation.

Procedure: ENCODE
Purpose: Encode parameter using master password. Used in password encryption.

Procedure: DECODE
Purpose: Decode parameter using master passwd. Used in password decryption.

Procedure: EQIVPWD
Purpose: Verifies that password stored in the database OPERATOR matches what user just typed. The user has three tries to enter the correct password.

Procedure: MENUPICK
Purpose: Displays a menu and allows the user to choose an option. Handles multiple columns, automatically changing format of menu display to accommodate.

Procedure: UPCCODE
Purpose: Generates the new Household (HHID) and Sample ID's. Called by the programs that create new Household and Sample ID's.

Procedure: CHEKACCS
Purpose: Compare two strings for overlap. If they are the same then access is granted otherwise access is denied.
0 - Access is denied
1 - Access is granted

This procedure calls the following four procedures: Procedure: HEXTOBIN, Procedure: BIN_AND, Procedure: HEXTOYN, Procedure: YNTOHEX.

Procedure: INCDATE
Purpose: Procedure to accept +/- and increment/decrement date, returning when a key is pressed indicating acceptance and/or movement of cursor, i.e. <Up>, <Down> or <RETURN>.

Procedure: INCVALUE
Purpose: Procedure to accept +/- and increment/decrement a value, returning when a key is pressed indicating acceptance and/or movement of cursor, i.e. <Up> <Down> or <RETURN>.

Procedure: CENTER
Purpose: Procedure to write a piece of text centered on the screen at a specified row.

Procedure: LOGUSE
Purpose: Procedure to log use of specific modules and logins. Writes to "TRACKING.LOG" automatically writes date, time, user, module name and optionally a text string

Procedure: Rec_Stat
Purpose: This function reports the status of records in the sampid.dbf database, depending on the value of overdue. If overdue = 0, then a complete report is given. If overdue = 8, then only those records which have been in the lab for 8 or more days are reported, and if overdue = 10, only those records which have been in the lab for 10 or more days are reported.

Procedure: Rec_Head
Purpose: To print out a header for lab reports

Procedure: Back_Rec
Purpose: To move back one page in lab sample reviews

Procedure: Disp_Rec
Purpose: To display a screenfull of records meeting the criterion set by lower_limit.

Procedure: ERR_PROC
Purpose: Global error-handling procedure. This procedure traps bugs in the tracking system when they occur. It sends the system administrator a message alerting him to the error and what the error was.

Procedure: BADENTRY
Purpose: This procedure displays error messages that the TS Administrator has defined.

Function: PADR()
Purpose: Right pads a character string with blank spaces.

Function: PADL()
Purpose: Left pads a character string with blank spaces.

Function: ZEROPAD()
Purpose: Accepts a string and a numeric, it returns the string left-padded to the length specified with the numeric.

Procedure: GET_HHID
Purpose: This is the standard interface for prompting the user to enter the HHID.

Procedure: GET_SAMP_ID
Purpose: This is the standard interface for prompting the user to enter a Samp ID.

Function: LAST_HHID
Purpose: Finds the last Household ID that was assigned to a specific sample. Assumes that HHID already exists and is valid, and that EVENTS is already open. Puts EVENTS.DBF in DATE order. Assumes that the last M14 event for that Samp ID is the correct HHID.

Program: **Track002.prg**
Description: Password/account maintenance
Purpose: Allows users to change their passwords. Allows TS Administrator to change their security levels thereby restricting or granting access to all modules.

Program: **Track003.prg**
Description: Generation of HHIDs at Stage 0
Purpose: This module creates new HHID's.

Program: **Track004.prg**
Description: Tracking system file/program maintenance
Purpose: This module allows the TS Administrator access to the menu options and access levels for the modules that make up the TS.

Program: **Track005.prg**
Description: Generation of Sample IDs
Purpose: Used to generate new Sample ID's. Ensures that no duplicate Samp ID's exist and that each Samp ID has no repeating numbers.

Program: **Track006.prg**
Description: Modification of Item types
Purpose: Were this module complete users would be able to create new Samp ID types. However, it is not complete. Called by Track005

Program: **Track007.prg**
Description: Modification of Population Strata
Purpose: Were this module complete users would be able to create new population strata for use in new HHID's. Called by Track003.

Program: **Track008.prg**
Description: Initial login of samples at receipt
Purpose: This module is the first step for a Samp ID after it has been created. All Samp ID's must be initialized before they can go any further in the TS. Initialization consists of declaration of sample type, tentative shipment number, login date, shipment destination and whether or not this is a valid sample.

Program: **Track009.prg**
Description: Write HHIDs for Bar Code printing
Purpose: Once HHID's have been generated in Track003 they need to be written to a file so that they may be printed. This module does this.

Program: **Track010.prg**
Description: Write SAMPLE IDs for Bar Code printing
Purpose: Once Samp ID's have been generated in Track005 they need to be written to a file so that they may be printed. Track010 handles this.

Program: **Track011.prg**
Description: Lab maintenance and reports

Purpose: This module contains the code used to interface the Lab with any samples that may need monitoring there. The list of such samples is currently:
- Soil Samples
- Food
- Water
- Sticky Film
- Floor Dust
- PM Filters

Other sample types may be added to this list, but that will be taken care of when it happens. The basic operations of this module are to generate reports giving details regarding the status of the samples (which samples are currently living in the lab section, which samples have been living there for over 8 days, which samples have been living there for over 10 days), as well as give the lab the opportunity to accept new samples in to the lab section and change the status of those already within (note: this action may also be handled by a field member, but that code is not included in this module as it is not a lab function).

Program: **Track012.prg**
Description: Entry/Modification of Confidential Data
Purpose: This module was slated to be the entry point for on-line maintenance of confidential subject data. However, due to resource constraints modules 12 through 16 were never completed to allow this to happen. They are currently place holders for future modules.

Program: **Track013.prg**
Description: Not currently being used

Program: **Track014.prg**
Description: Not currently being used

Program: **Track015.prg**
Description: Not currently being used

Program: **Track016.prg**
Description: Not being used

Program: **Track017.prg**
Description: Aliquot assignment
Purpose: This module records that a sample has been assigned an aliquot.

Program: **Track019.prg**
Description: Selects samples to be shipped to outside labs.
Purpose: Allows users to select samples from a menu that are ready to be shipped or to manually enter samples. Users can select the appropriate destination for the Samples.

Program: **Track022.prg**
Description: HHID Assignment
Purpose: This component allows samples to be assigned to Households.

Program: **Track023.prg**
Description: Sample Login from field
Purpose : Allows user to record what happened to a sample when it was returned from the field. Possible events are: M15 - Returned from field exposed
M16 - Returned from field not exposed
DED - Sample killed, integrity compromised
Records date, time, Tech ID, and HHID associated with this Samp ID.

Program: **Track024.prg**
Description: Mat Tech to Lab Transfer
Purpose: This module will allow you to transfer samples to the lab before they go into the field. For example, 25mm Teflo filters need to be pre-weighed by the lab before they are used in the field.

Program: **Track025.prg**
Description: Lab to Mat Tech Transfer
Purpose: This module will allow you to transfer samples to the Materials Tech before they go into the field. For example, 25mm Teflo filters are returned to the Materials Tech after being weighed.

Program: **Track026.prg**
Description: Sample Status Report
Purpose: This component will allow you to view the status of a sample at any given point in the system. Displays to the screen with the option of printing to the printer.

Program: **Track027.prg**
Description: Global Sample Kill
Purpose: This module will allow you to globally kill a sample and its aliquots, if any. The user is prompted with the Samp ID's of the aliquots and can choose to kill them if desired.

Program: **Track028.prg**
Description: Mat Tech to Lab Post-Field Transfer
Purpose: This module allows the Materials Tech to transfer Samples to the lab once they have returned from field exposure.

Program: **Track030.prg**
Description: HHID report
Purpose: This component will allow you to display the samples that have been assigned to a specific HHID.

Program: **Track031.prg**
Description: Sample Inventory Report
Purpose: This component allows you to print a list of samples in inventory. Only valid samples will be displayed.

Program: **Track033.prg**
Description: Nogales Samp ID Creation
Purpose: This program is used to create a data file of Samp ID's that will be used in the Nogales Border Study. All Samp ID's are separate from the NHEXAS project.

Program: **Track034.prg**
Description: Data Receipt
Purpose: This program will track the data that is received back from outside labs. Operating premise: If a sample has a ship code then it must eventually have data returned. This event can be recorded. Any and all

samples that are still outstanding, i.e. have no data returned as yet, can be printed out. This module is under construction.

Program: **Track035.prg**
Description: Report sub-menu
Purpose: This module displays a sub-menu for report generation.

Program: **Track036.prg**
Description: Aliquot report
Purpose: This component will allow you to print a report of the various aliquots that have been shipped.

Program: **Track 037.prg**
Description: Not being used
Purpose: This module is still under construction.

Program: **Track038.prg**
Description: XRF->HHID Generator
Purpose: This component will allow you to list the HHID's associated with all XRF Samples.

Program: **Track039.prg**
Description: Sample Inactivity Report
Purpose: This component will allow you to print a report of samples that have not shown any activity.