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Computer Software Configuration Description, 241-AY & 241-AZ Tank Farm MICON Automation System

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Abstract: This document describes the configuration process, choices and conventions used during the configuration activities, and issues involved in making changes to the configuration. Includes the master listings of the Tag definitions, which should be revised to authorize any changes. Revision 2 incorporates minor changes to ensure the document setpoints accurately reflect limits (including exhaust stack flow of 800 scfm) established in OSD-T-151-00019.

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Release Approval

Date

Approved for Public Release

COMPUTER SOFTWARE CONFIGURATION DESCRIPTION
FOR THE
241-AY AND 241-AZ TANK FARM
MICON AUTOMATION SYSTEM

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Attachments:

- A. Discrete Inputs
- B. Discrete Outputs
- C. Analog Inputs
- D. Analog Outputs
- E. Virtual Analogs
- F. Loop Definitions
- G. Virtual Discretes
- H. Micon I/O Board Jumper List

1.0 INTRODUCTION

1.1 PURPOSE

This document describes the Computer Software Configuration for controlling software for the MICON¹ Distributed Control System (DCS) located at the 241-AY and 241-AZ Aging Waste Tank Farm facilities in the 200 East Area. The MICON DCS software controls and monitors the instrumentation and equipment associated with plant systems and processes.

The intended audience for this document is the software maintenance personnel, who need an understanding of the choices made during configuration so that future changes can be made consistent with the underlying philosophy.

1.2 SCOPE

Configuration changes should be made only as prescribed in the approved "Computer Software Configuration Management Plan", HNF-SD-CSCM-W030-011, which defines the materials under configuration control, how they are identified, and the process for authorizing changes. The reader is assumed to be familiar with the CSCM Plan.

The current document covers the mechanics of making an (authorized) configuration change. Configuration is not programming in the classical sense; being more of a "fill-in-the-blanks" approach using special configuration programs provided by MICON. However, there are a number of implementation decisions and conventions which influence system appearance and operation. Understanding these conventions, and the basis for them, is necessary to properly maintain the system.

Additionally, a number of problems in the configuration utilities require special work-arounds to be able to make changes to the configuration. This document provides guidance in these areas.

This document does not attempt to duplicate any of the material already (adequately) described in the MICON manuals. The MICON manuals should be used to understand the functions and use of the system and the configuration utilities. The scope of the current document is to document (for maintenance purposes) the application choices made during the configuration process, and how the MICON system is utilized to implement them.

Throughout this document there are numerous references to computer filenames, directories, and commands. Such items are literal references to computer standard names and are distinguished by being written in italic font (e.g. *filename*). Descriptions of items or menu choices are not literal references, so are not in italics, but are typically shown in quotes and/or perhaps capitalized.

¹MICON is a trademark of MICON-Powell Process Systems, Inc.

1.3 DEFINITIONS

Application Software

Software designed to fulfill specific needs of a user; for example, software for navigation, payroll, or process control. (IEEE Std. 610.12-1990). For this DCS, this is the user created configuration software for the SPARC II workstations, and user generated configuration programs for the U-32² and RCM-32² controllers.

A/S OPEN²

The brand name of a Distributed Control System supplied by the MICON Company (Powell Process Systems) of Houston, Texas.

A/S VIEW²

The proprietary operation and configuration software provided by the MICON Company for the MICON A/S OPEN Distributed Control System. This is the user interface software on a SPARC II workstation.

Controller

[1] Sometimes generically refers to an RCM-32 or U-32 programmable controller (see RCM-32 and U-32).

[2] Sometimes refers to an analog control device (see PID Controller).

Data files

Data files are primarily developed using MICON utilities and subroutines, and Sun Microsystems editing utilities to a lesser extent. Data files define input and output variables (analog and digital), define data control and processing variables, provide specific attributes to these variables, and direct the RCM-32 and U-32 controllers in the processing of these variables (see Tag).

Distributed Control System (DCS)

A computer system that divides responsibilities up between several types of computers. This type of system allows one computer to perform control at a local level while networked to others that provide display and control to the operator.

²U-32, RCM, AS/OPEN, AS/VIEW are trademarks of MICON-Powell Process Systems, Inc.

GPLI

The General Purpose Local Area Network (LAN) Interface (GPLI-32) serves as a universal communications interface, or bridge, between the Sun operator/engineer workstations and the field control processors (RCM-32 and U-32).

Intelligent Operator Keyboard (IOK)

A dedicated, non-QWERTY keyboard used to access displays on a SPARC II workstation and control plant processes.

Local Area Network (LAN)

A data highway used to pass information between the GPLIs and U-32s. It uses a token-passing carrier-based protocol.

Local Control Unit (LCU)

A process control cabinet containing up to two U-32 controllers, several RCM-32 process controllers, a communications bus, a Local Operator Interface, and miscellaneous hardware (racks, cooling fans, power supplies).

Local Operator Interface (LOI)

A personal computer clone with an amber electroluminescent touch screen display located in the door of an LCU cabinet. The touch screen is visible from the outside of the cabinet. An LOI can display information for signals and tags residing in the LCU. This information is in the form of MICON group displays and simple alarm messages. Graphics cannot be displayed on an LOI.

Pipe and Instrument Diagram (P&ID)

A schematic of a process. These drawings show the major equipment components (chillers, fans, filters, heaters, pumps, separators, tanks, valves, and so on), the connecting piping and services, and the instrumentation. These drawings are traditionally used as a design guide and reference for process control.

RCM or RCM-32

A multi-loop programmable controller capable of reading real world inputs, providing outputs, processing data, performing continuous control/logic functions, and limited batch control.

Release

Release is an activity that certifies by a stamp that the document is a controlled version, is approved for the intended use, is entered into a database, and is retrievable. (WHC-CM-3-10, Rev. 0).

Software

Computer programs, procedures, and possibly associated documentation and data pertaining to the operation of a computer system. This includes user-provided instructions and data that implement preprogrammed algorithms in control systems; computer codes and data that will reside in firmware; and where specified by the Cognizant Manager, user-provided instructions and data used by commercial software such as spreadsheet and database packages. (IEEE Std. 610.12-1990 Modified per WHC-CM-6-1; WHC-CM-3-10, Rev. 0).

Solaris software

Proprietary software containing the UNIX³ operating system and the X-Window⁴ Motif software. This software is provided by Sun Microsystems.

Tag

A generic term for variables (analog and discrete) defined by the A/S VIEW software and used by the programmable controllers to process input and output data as specified by the executable logic files.

U-32

A multi-loop programmable controller with dual network communications capability. The U-32 distributes data between the RCM-32 and GPLI. Like the RCM-32, the U-32 is capable of processing data, performing continuous control, logic control, and limited batch control.

1.4 SECURITY

The security for the MICON system is provided by limiting access to the system through the use of passwords. The system administrator controls access through a login procedure which consists of Login name and a password. The access control programs are pre-existing and are found in the UNIX operating system and A/S VIEW. These programs allow the system administrator to define the level of access and the breadth of allowed operations.

³UNIX is a trademark of the American Telephone and Telegraph Company.

⁴X-Window is a trademark of Massachusetts Institute of Technology.

1.5 HARDWARE/SOFTWARE DESCRIPTION

Figure 1: MICON System Architecture

The MICON A/S OPEN Distributed Control System (see Figure 1) consists of four workstations (3 operator, and 1 engineering), a data highway, and six process controller cabinets (4 Local Control Units, LCU's, and 2 Remote Control Units, RCU's).

Each workstation is based on a Sun Microsystems Scalable Process Architecture (SPARC) II workstation, which provides 64 megabytes of memory, a single one gigabyte hard drive, one 3-1/2 inch floppy drive, a 150 megabyte (MB) tape drive, a QWERTY keyboard, and a trackball. In addition, each SPARC II provides a video output, an RS-232 serial port, and two Ethernet[®] ports (a thick-net and a thin-net). The video port is connected to a high resolution color monitor. The RS-232 port is connected to an Intelligent Operator Keyboard (IOK). The IOK is preprogrammed by the MICON Company and cannot be changed by the user. The thin-net Ethernet port is connected to the data highway via a General Purpose Local Area Network (LAN) Interface (GPLI). The GPLIs pass information between the SPARC-based consoles and the process control cabinets. The thick-net provides a LAN connection between the four SPARC II consoles via a multiport transceiver.

⁵Ethernet is a trademark of the Xerox Corporation.

The redundant data highway, which is a LAN using a high speed (10 megabaud) token-passing carrier-based protocol, is the main data link between the consoles and the process control cabinets. It consists of two redundant rings of coax cable that run between the GPLIs and the U32's in the LCU cabinets. One data highway is monitored by one of the redundant GPLI, and the other highway is monitored by the other GPLI. If one of the redundant cables fail, communication is automatically passed to the other and an alarm is generated. Each GPLI (of a pair) is dedicated to monitoring only one highway - thus if one GPLI fails, the data highway ceases to be redundant until the faulty GPLI is replaced. However, highway redundancy for this MICON DCS is achieved by using two pairs of GPLIs. As long as both GPLIs in one of the pairs are fully operational, the highway is redundant because the good pair will broadcast a switch-over message to all other units when an error is detected.

A process control cabinet, or Local Control Unit (LCU), consists of two U-32 controllers, several RCM-32 process controllers, a communications bus, and a Local Operator Interface (LOI). There are four LCU cabinets, and in addition, LCU-3 and LCU-4 are each connected to a Remote Control Unit (RCU). The RCU's (not shown in Figure 1) contain RCM-32 controllers which are connected to LCU-3 and LCU-4 via a field bus. LCU-1 and LCU-2, which are located in separate rooms and separated by a fire barrier, provide for redundancy of safety class 2 controls. Each LCU contains a pair of U-32 controllers, which are redundant. The primary purpose of the U-32's is to pass information between the GPLIs and the RCM-32's, but they can also perform logic functions. The RCM-32's perform control and logic functions, and provide the wiring terminations for the inputs and outputs to plant equipment. The RCM-32's are not physically redundant, although Safety Class 2 functions have been made redundant by system logic and hardware design. Each U-32 communicates with its RCM-32s via a slower (1 megabaud) token-passing communication network called a field bus. The field bus is not redundant, uses RS-485 twisted pair, and communicates using the MICON LAN Protocol (MLP). An LOI (not shown in Figure 1) is a personal computer clone with an amber electroluminescent touch screen display located in the door of each LCU cabinet. The touch screen is visible from the outside of the cabinet and can provide group-like displays for signals and tags residing in the LCU.

There are four types of RCM-32s used in this system; A, F, D, and Dr. The A and F cards are used primarily for analog signals. They can accept inputs from any standard analog instrument type (4-20 milliamp, and DC voltages) and provide standard 4-20 milliamp output signals. In addition they provide two 28 volt DC discrete (on/off) channels. These may be used for input, output, or both. An A card typically provides 26 analog inputs and 4 analog outputs. Each F card provides 26 resistance temperature device (RTD) inputs, 4 analog outputs and 2 digital I/O points. The D card is used for discrete control. It provides 32 on/off channels that can be used as inputs, outputs, or both. Both inputs and outputs are 28 volt DC. The Dr cards are similar to the D cards except inputs are 120 volt AC or DC and the outputs are 3 amp dry contact relays.

Software for the SPARC II workstations consists of four layers. The first layer is the UNIX operating system, and the second is the X-11 windowing system with the Motif (X-Window Motif) graphics user interface (GUI). Both the UNIX operating system and X-Window Motif are provided by Sun Microsystems under the trade name Solaris. The third layer is the A/S VIEW process control software provided by the MICON Company. The last layer is the user

configuration, or application software, which implements the functions specific to our application.

The U-32 and RCM-32 software consists of three layers. The first is the RTS-C based operating system supplied by the MICON Company. The next layer is the MICON controller program compiler, also supplied by the MICON Company. The third layer is the user configuration program, which is compiled object code. This program is created by the MICON controller program compiler using source code input. The source code, or applications software, is created by the A/S VIEW software in the SPARC II workstations based on user input. The source code is then downloaded over the data highway to the U-32s and RCM-32s, where it is compiled.

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2.0 CONFIGURATION CONTROL

2.1 CONFIGURATION BASIS

The basis for configuration control is given in HNF-SD-CSCM-W030-011, "Computer Software Configuration Management Plan". The primary documents which define and control the software configuration are the P&ID's, Logic Diagrams, and Tag Listings. These are the design basis documents which define the functional operation of the software.

To implement these functions they are entered into the MICON Distributed Control System (DCS), where the resulting information is internally stored in numerous data files. Most of the DCS files are unreadable, incomplete, or otherwise poorly suited for generating human-readable hard copies. Consequently, the DCS files are controlled by version identification, rather than by actual content of the file. A software release document defines the version of each file which is applicable to that release.

Three types of software related items are identified for the purposes of controlling revisions and installation:

The Design Basis Documents which define the functional requirements are:

- 1) P&IDs
- 2) Logic Diagrams
- 3) Tag Lists

The commercial software which provides the application base:

- 4) Solaris
- 5) A/S VIEW

The configuration process generates the on-line configuration data files:

- 6) Controller Files (RCM/U32 files)
- 7) Graphics Files
- 8) Annunciator Config file
- 9) Group Config files
- 10) Trend Config file
- 11) Historian Config file

2.1.1 P&ID's (H-2-131060 thru H-2-131081)

The P&ID's define basic system functions, tagnames, and locations of interlocks and alarms.

2.1.2 Logic Diagrams (H-2-826366 thru H-2-826458)

The Logic Drawings define the required logic of the control system. (Note: Custom graphics screens have been developed from the released H-2's to allow on-line viewing of the dynamic state of this logic; these graphics are distinct from the "source" H-2 Logic Diagrams,)

2.1.3 Tag Lists (Attachments A-F)

The Tag Lists define attributes associated with each tag, such as descriptive name, range, units, alarm setpoints, and alarm priorities. Note that the attached Tag Lists are not the actual on-line tag database, but rather define requirements for the on-line database. Changes to attributes defined in these Attachments shall be made by ECN to this document.

2.2 RELEASE DOCUMENT

The software release document defines the files and versions applicable to a particular identifiable version of the software. The release document establishes an identifiable and auditable "Release Version" for each step change in the software configuration. The release identifier shall be in the following form:

syntax:	M.N[a]	; M=[1..], N=[0..], a=[a-z]
example1:	1.0	; Initial release
example2:	2.3a	; Error correction to version 2.3

The first numeral is intended for significant or major evolutions of the software. The second numeral would be incremented for a series of minor upgrades. Finally, the optional alpha-character would be used to signify correction of errors in the prior release.

A utility has been prepared to generate the Release Document automatically. Each change shall be identified as a new "Release" and include a new Release Document.

3.0 CONFIGURATION CONVENTIONS

3.1 DATABASE FILES

The master configuration database is defined via a number of *"*.txt"* files in directory */home/Data/Dbase*. These files are imported into the working database either collectively via a Database Reset, or individually via import commands from the Run directory. To determine the form of the individual import commands, examine the file *Run/impall.sh*.

CAUTION: A/S VIEW provides a command to perform a Database Export, but this feature is unreliable and should NOT be used. Any changes to information in the database files, must be made by editing the *"*.txt"* files (e.g. using *vi*) and importing the files. Do NOT try to change Database information from the Configurator utility.

3.1.1 Device Names

Controller device names are defined in */home/Data/Dbase/devices.txt*, and implicitly establish the size of the database. The device names are physically oriented identifying the module type and slot number. Revising or adding controllers to this file would require a major rebuild of the database. The existing configurator will not be able to function if a controller is either added or changed; essentially the existing configuration files would be invalidated. The bottom line is that additional modules cannot be readily added, nor can the existing ones be readily re-arranged.

3.1.2 Tag Definition Files

A series of *"*.txt"* files in */home/Data/Dbase* provide definitions of the Tags, with a different file for each type of Tag. Specifically, these files are *ai.txt*, *ao.txt*, *va.txt*, *di.txt*, *do.txt*, *vdi.txt*, *isw.txt*, *mdi1.txt*, and *mdi2.txt*. The field definitions for these files are fairly clearly defined in the MICON operations manual. The files are fixed field format, and must be imported before they take affect. Import errors may generate an error message in the error files in this same directory.

Most of the information in the tag definition files must be inserted into a controller file before it fully takes affect. Thus, any change to the information in these files must be completed by deleting the applicable steps from the configuration files and inserting new steps which automatically pick up the new information from the Database; this is described in section 3. In addition, the new database must be downloaded to the other workstations.

3.1.3 Tag_Names

Tag_names, as defined in the Tag Definition files, are actually an attribute of a "point" number. The system is NOT uniformly "Tag-based", rather much of the system is "point-number" based. All defined points are (already) in these Tag Definition files

and have some default Tag_name. Additional points cannot be defined, but unused points can be redefined and used.

Tag_names can be almost any 16 character string, but cannot contain blanks. The same Tag_name and description is used for all MICON generic displays, including the alarm readout and the group display. Originally, it was planned to also get the Tag_name from the database for the graphics screens but this did not work well, so the tag on the Graphics screens is simply manually entered text. Since the Tag_name should display nicely on two 8-character lines in the group displays, manual formatting is used to place the desired character in position 9. This is accomplished by multiple underlines in the Tag_name, since embedded spaces or other formatting characters are not accommodated.

Tag_names can be changed with moderate difficulty, requiring explicit update of each place where it is used, including the controller files, graphics, groups, trends, annunciators, etc. Since all used Tags (except for Internal Switches) have been given ergonomic names, unused tags can be located by looking for those having generic names, such as DI01289. Generally, the unused Tag would be renamed to a more descriptive name prior to use. However, the generic name (e.g. IS001102) has been retained for the numerous Internal Switches (ISW's) used to store intermediate logic results for display on the live Logic Graphic screens. To locate spare ISW's, the controller "scroll file" and "controller file" must be searched (for example using *grep*) for candidate unused tags. A utility script (ref. *spareIS*) has been written to help locate spare ISW's,

3.1.4 Other "*.txt" files

In addition to the Tag Definition files discussed above, the */home/Data/Dbase* directory also contains several other "*.txt" files which define other configuration parameters - for example, the password files, annunciator configuration, trend configuration, and GPII configuration. In contrast to the Tag Definition files, these other files should NOT be edited directly, but rather are revised thru the applicable configuration utility, which is discussed in subsequent sections.

3.2 PROCESS GRAPHICS SCREENS

The primary operator control interface uses a set of (up to) 32 graphic screens which mimic the P&ID's. These screens provide process controls and animated process information in a layout very similar to the P&ID's. Also included are screens for help, system overview, integrated system operation (macros), and system health monitoring.

The Process Graphic screens have been named "01..." thru "32..." to assure they always collate first, since the first 32 screens (in alphanumeric collating order) in the Data directory function uniquely with the IOK keyboard. Named this way, they can be selected directly using the number pad on the IOK.

3.2.1 Color Scheme

The MICON configurator program only supports 8 colors. While DataViews could provide many more, the system has been implemented using 10 colors which mesh with the (fixed) MICON colors. The *01Help.v* screen summarizes the color scheme. Usage by color is summarized below:

- 1. Black - Background
- 2. Red - Highest priority alarm
- 3. Yellow - Medium priority alarm
- 4. Green - Numerical values NOT in alarm (but have alarms)
- 5. Cyan - "Information only" values (no associated alarm)
- OR Liquid process flows (water, glycol, condensate)
- 6. Orange - Main ventilation process flow
- 7. Blue/Green - Building process flow
- 8. White - Electrical process flow
- OR "Information" alarm color
- OR Construction lines
- OR The ON state of an On/Off indicator
- 9. Dk Blue - The OFF state of a On/Off indicator.
- 10. Gray - Two shades of gray are used to implement operator control "buttons". The button is a light gray when enabled, changing to a dark gray when disabled.

All colors are employed at their highest intensity or hue, except for the Grays (which are a version of White) and the Blue/Green.

Dk.Blue and White are used in a few places to display an On/Off indication similar to an indicator light. When used in this manner, White indicates the ON or ENERGIZED state, but has no alarm implications.

3.2.2 Alarms

Red, Yellow, and Green are utilized only for alarm purposes - Red for a high priority alarm and Yellow for a medium priority alarm. White is also used for "Information alarms", which require no operator action. Process symbols which have associated alarms are encoded in the process color when no alarm is present, and switch to the applicable alarm color upon alarm. Numerical values which have associated alarms are encoded Green to denote that no alarm is present, and change to the applicable alarm color when they are in alarm. An exception is the "under range" alarms (nominally 2mA on a 4-20mA loop), which being "out-of-range" cannot be used to change the color of objects on the graphic - thus these "invalid signal" alarms do not change the color of the numerical value. Where under range is the only alarm associated with a channel, the base color has been left as Cyan, reserving Green to clearly indicate that the value will change to alarm color when in alarm.

Numerical values with associated alarms are configured explicitly to change colors at the alarm points. In contrast, the associated Tagname text is linked directly to the Alarm feature of the A/S DRAW editor; the Tagname will therefore change to alarm color and flash when an alarm occurs. The operational effect is that the flashing Tagname indicates that the alarm has NOT been acknowledge, while the numerical value indicates whether the current value is (still) in alarm. If an alarm setpoint is changed, the Tagname link via the Alarm will usually update the setpoint automatically, while the numerical value must be explicitly adjusted to change colors at the new setpoint.

3.2.3 Object dynamics

The Process flows are classified by color into four major groups - main vent, building vent, liquids, and power. Within each group, on/off or open/close status is denoted by fill/no-fill status of the process symbols. Process equipment symbols also change to alarm color if they go into alarm.

The DataViews subdrawing feature is used to change many of the symbols between the various color/fill combinations. In spite of allegations to the contrary in the MICON manuals, subdrawings cannot contain dynamics - they can only be static pictures which are selected by a dynamic control in the graphic which uses them. Subdrawings drawn in White, however, can be changed in color when they are used.

3.2.4 Operator Controls

All operator controls on the graphic screens are shown as gray "diamonds" or in a few cases as rectangular selection buttons. Navigation arrows appear similarly as selectable buttons, but only provide navigation between screens. Navigation is provided by simply using DataViews to name the button the desired target screen.

Operator control buttons provide access to Tags which affect process operation; such Tags are usually named "HS...". The rectangular buttons provide access to parameters, but these parameters do not actually change the process and in general are not used until the associated "diamond" shaped control is employed. All operator controls which start/stop or otherwise change the process logic have been implemented as diamond-shaped interlock buttons. Access to the underlying tag is achieved by simply using DataViews to name the button as the desired target Tagname. A/S VIEW will then automatically pop-up the named Tag interface window when the button is selected.

Operator control buttons are implemented on the graphics screens by subdrawings, with the dynamic used to switch between light/dark versions based upon whether the button is active. An in-active button can still be selected and operated. The pictorial change is only to inform the operator that the associated logic will prevent (interlock) that change from having the intended affect. Except for PID buttons, the text on the button is linked to the database to display the current state (description) of the Tag.

For PID buttons, the text is static but a rectangular box is displayed to denote whether the PID is in Auto or Manual, and to display the setpoint in Auto.

3.3 LOGIC GRAPHIC SCREENS

In addition to the Process Graphics discussed above, the logic diagrams which define the system operation have been entered into the system. The Logic Graphic screens are animated to show current logic states or numerical values. These drawings are very useful for system verification or troubleshooting. They must be revised manually whenever a change is made to the system Logic diagrams.

The Process Graphic screens include navigation arrows for access to the Logic Graphic screens. Similarly the "Process" button on the Logic Graphic returns to the applicable Process Graphic. These links must also be maintained manually.

3.4 GROUP DISPLAYS

A Group Display is 1-8 Tags displayed as "faceplates" in a window, using the standard MICON group capability. Though not as ergonomic as the graphic screens, the entire process can be run from the Group Displays. Groups are important because of the requirement to be able to run the system from the LOI's, where only groups are available. Hence, effort has been made to integrate groups into the system so the operator can become familiar and comfortable with them.

There are three different sets of groups, one of which is a maintenance aid. While each is configured separately, they are intended by design to be kept uniform and consistent. Thus a single "change" to a group will often require revising two or three different groups, and possibly as many as six.

3.4.1 OCS Process Groups

A set of OCS Groups have been organized in association with the process, so that related controls and indications are together on the same group. Specifically, all the Tags associated with a particular Process Graphic screen have been organized into a series of consecutive groups, with each group being focused on a particular part of the process. Within a group, the arrangement of tags for particular functions (e.g. a pump control) is common for all similar functions. This makes the groups as user-friendly as possible.

At the top left of each Process Graphic screen, a navigation button provides direct access to the first of the groups applicable to that portion of the process. Selecting NEXT will iterate thru all those for that portion of the process. Also from each group display, the "goto" list includes the associated Process Graphic for easy return.

3.4.2 LOI Groups

The LOI Groups are built to match the Process groups as close as possible, so that the operators will feel somewhat comfortable operating from them. Unfortunately, each of the 4 LOI's can only display tags which are available in the associated LCU. Further, the LOI group identification numbers are repeated within each LOI (i.e. each LCU has a group 1). Thus, group numbers at each LOI have no relationship to the numbers at other LOI's or at the OCS - basically, a cross-reference is needed to find the group numbers in the LOI's, and this is provided in an operating procedure. Within these limitations, the same groupings of 8 co-located Tags are used at the LOI's as at the OCS. Where the Tags co-located in a group are from different LCU's, the same group is provided in all applicable LCU's; when the Tag is not available, it is shown as OFFLINE when the group is accessed.

3.4.3 Module Groups

The third set of groups is organized by controller, showing the Tags in physical order for each controller module (RCM). These are maintenance oriented, are available only at the OCS, and are not normally used by the operator. They are accessed by selecting the desired group from the Groups menu. Module group numbers are the larger values above the normal OCS groups. They were (inappropriately) laid out with space for adding additional intervening modules which is actually not possible.

3.5 ANNUNCIATORS

The Annunciator panel at the bottom of the screen provides 40 windows, each of which can each be triggered by up to 20 alarms. The annunciators have been configured so that all the alarms from a particular Process Graphic trigger a single window. Thus selecting that annunciator allows navigation to the associated Process Graphic for a more detailed look at the alarm. In a couple of cases (Primary Exhaust and Comm Failures) two windows were required to contain all the alarms. The order of alarms in the list is setup to group related alarms together as requested by Operations.

3.6 TREND/HISTORIAN

Trend and Historian plots can display up to 4 analog Tags on each plot. Although configured separately, the Trend and Historian plots have been setup to match - that is, each Trend plot has a corresponding Historian plot with the same tags. The Historian plot will only display data for those variables which are actually archived, but with this setup the Historian plots will not need to be adjusted if different data is recorded. (Selection of Tags to record to history is via the *"*.txt"* files.)

The Tags co-located on the Trend/Historian plots are grouped in conjunction with the Process Graphics, so that related process variables are together. For each PID controller, a tuning trend display has been configured which displays the process variable, process setpoint and output value; a common color arrangement has been employed for convenient orientation to

the plot. Other special Historian plots could be setup for other groupings of related historical values.

On the Process Graphics, each analog variable has been named as the applicable Trend display, "#.t". This provides navigation to the Trend display by simply clicking on the desired (analog) value on the Process Graphic screen. (The tagname on the Process Graphic, on the other hand, is not named so that (by default) clicking on it brings up a window showing the range and auxiliary attributes, such as alarms.)

3.7 SECURITY

A UNIX password is required to startup the workstation and start the A/S VIEW program. A/S VIEW must be started from the "*micon*" account. A different password has been setup for the *root* account to prevent un-authorized access to (UNIX) system files. However, A/S VIEW does not support automatic update of time between the workstations when *root* is password controlled. This difficulty has been remedied by adding an *rd*ate command to the *crontab* for the *root* account.

Once A/S VIEW is started, MICON security features provide access limitations for normal operator process control. Each person could be setup with a separate user login, but Operations preferred to have a fewer number of "functional accounts" which are shared by all operators within that functional classification - thus the implementation of the *trainee*, *operator*, and *supervisor* users. Security is basically provided by controlling access to the A/S VIEW menu choices (the top title bar items) and a few other pop up windows. One problem is that access to the annunciator panel cannot be restricted, so all users can acknowledge alarms.

There is no explicit provision to limit access to particular controls - a user either has access to all or none. Thru DataViews, access to a specific graphic screen could be limited to a specific User Group, but not multiple User Groups. By only placing a control on a limited access screens, some partitioning could be achieved; however, the tags would have to be removed from all Groups, since group access is either all or nothing. As implemented, the Operator group has full and complete access to all operations, and partitioning would be very difficult and cumbersome.

3.8 CONTROLLER PROGRAMS

The programs in the U32's and RCM's are defined by logic diagrams H-2-826366 thru H-2-826458. These diagrams specify the functional performance, as well as many implementation details. Implementing or revising these programs is addressed in a later section.

As defined on the logic diagrams, user programs reside in both the U32's and RCM's. There are certain advantages to both. Programs residing in the RCM's can continue to control their outputs even when the U32's, Fieldbus and/or the Token Ring networks fail. If a given RCM has all the I/O it needs to continue, this provides advantages in some instances. A single

RCM failure, however, defeats that entire logic because the RCM's are not redundant. On the other hand, since the U32's are redundant, logic contained there is more likely to remain functional, but the U32 does not have direct access to any I/O except via the Fieldbus (to the RCM's). The philosophy employed is to locate the lower level PID controls in the RCM's, but the overall integrating logic in the U32's. Specifically, that logic which assesses system integrity and decides whether to switch to a backup (fan, heater, etc) is in the U32's, for best reliability.

4.0 GENERAL REVISION PROCESS

The general rule of making revisions is to understand what is desired and exactly what to revise prior to starting into making the changes. The MICON system is not well suited to a trial-and-error approach to making changes - because many of the "back out" or "cancel change" functions do not work and may corrupt the files. Know exactly what is to be changed, know how to do it, and know that it works - otherwise don't do it. Don't push the system or it will kick you back. This section only describes the general overall process. The following sections discuss the use of each of the configuration processes in more detail.

4.1 DETERMINE DESIRED CHANGES

Logic Changes are potentially the most complex because they can affect all the configuration items. Draw out the new logic. If new or revised tags are needed, determine where they will come from, and whether they need to be renamed. If spare ISW's are needed, locate them and annotate the Logic. Determine what old logic needs to be deleted; review the prior configuration files to determine how the logic was implemented and exactly what steps to delete and what tags will be freed up. Determine what changes will be necessary to the graphics, groups, trends, and annunciators.

4.2 MAKE DESIRED CHANGES

Since the EWS is the master repository of the configuration, make changes on the EWS and check them out as much as possible prior to downloading to the controllers and/or operator stations. At the present time there is no capability to compile controller files except by downloading to the on-line controllers.

- 4.2.1 Make changes to "*.txt" file(s) first, and import them. Exit and re-start X-windows before proceeding.
- 4.2.2 Use the Controller Configurator to make changes to the controller files. Any tags for which attributes have been revised need to be updated in the controller file which defines them. Delete/add any necessary logic.
- 4.2.3 Use A/S DRAW to make necessary changes to the graphics screens. Graphics screens will usually not require changing for changes in tag attributes. However, note that for alarm setpoints, the Process Graphics must be changed. Update the Logic Graphics for any logic changes.
- 4.2.4 Use the Group configure program to make any necessary changes to OCS Groups or Module Groups. If a tag name is changed this must be updated in any affected groups. Changes in the range will be handled automatically.
- 4.2.5 Use the LOI configure program to make any necessary changes to the LOI groups. Again, tag changes must be made manually, perhaps in multiple groups in different LOI's.

- 4.2.6 Use the normal Trend/Historian interface to pull up and correct any Trends or Historian displays which are affected. If a tag name is changed this must be updated in any affected displays. Similarly, a change in the range of the value must be corrected in all affected displays.
- 4.2.7 Use the Annunciator configurator to make any changes to the annunciator definitions. A change in a tag name must be updated manually.
- 4.2.8 Use the User Configure program to make changes to password security features.

4.3 DOWNLOAD THE CONFIGURATION

In general, the revised configuration must be downloaded to the Operator Stations, U32/RCM's and LOI's. Many changes do not require a full download, although if there is any question, the full download can be performed. Any change to the "*.txt" database files requires a complete download to the Operator Stations. In addition, any revised Controller File or LOI group must be downloaded.

4.3.1 Operator Station Partial Download

For changes which do not affect any "*.txt" database files, only the affected files need be downloaded. The applicable file(s) must be transferred to each Operator Station. Reference the utility script *sendFile* which expedites this process by sending a single file to all three OCS stations.

e.g: `> sendfile filename /home/Data`

would send file *filename* to directory */home/Data* on all OSC stations.

Files which can be considered for partial downloads are:

- graphic view files	e.g. <i>01Help.v</i>
- group screens	<i>group.cfg</i>
- annunciators	<i>annuncnfg.cfg</i>
- trends	<i>trendcnfg.cfg</i>
- history	<i>histcnfg.cfg</i>

(Note that the *sendFile* script is NOT the best tool for downloading the controller files.)

4.3.2 Operator Station Full Download

Except for the U32/RCM controller files and the LOI files, all other configuration files pertain to the Operator Control Stations and must be downloaded to each station. For any change to the underlying database (*.txt files) a full download must be performed.

A full download is accomplished by removing the */home/Data* directory and copying the new version from the EWS. Utility scripts (discussed in detail in later sections) have been written to facilitate this operation and to minimize the dangers of deleting improper files. The *removeData* script should be installed only on the OCS stations to avoid accidentally deleting the master files on the EWS. Conversely, the *downloadData* script should be installed only on the EWS to avoid accidentally overwriting the master files from another station. To perform a full download:

- 1) Shutdown AS/View on the target machine
- 2) From the target */home* directory, run the *removeData* script.
 `> removeData`
 Answer "y" for removal of the read-only files.
- 3) From the EWS */home* directory, run the *downloadData* script.
 `> downloadData micon#`
- 4) On the target, exit X-windows, re-login, and restart AS/View to initialize the database.

4.3.3 U32/RCM Program Download

Controller download must be performed from the *MASTER* station, which has been setup to be Operator Station 1 (*micon2*). This station was chosen as *MASTER* since the *MASTER* also performs overall time coordination and must be "up" all the time. A different *MASTER* could be set by changing *micon2* to *SLAVE* and then the desired station to *MASTER*.

Since the original configuration files are maintained on the EWS, the configuration file(s) would typically be downloaded to the *MASTER* by either a complete database download or by sending only the needed configuration file(s). Note that a partial download of the controller files is a different issue than a partial download of OCS related files. While a complete download (*downloadData*) does transfer the U32/RCM programs, use the *sendConfig* script (rather than *sendFile*) for a partial U32/RCM download to the *MASTER* (reference *sendConfig* discussion in a later section). Thus:

```
> sendConfig a3_r0
```

will transfer all files associated with *RCMA_3*, rev *r0* to *micon2*.

From the *MASTER* station, select "Sys-Mnt - Download RCM/U32" to perform downloads to the U32/RCM's. Note that few, if any, of the controllers have sufficient memory to hold two versions of its controller file, so the prior version must be deleted before downloading the new version. This precludes "bumpless" transfer from one version to another using the "Preserve" option. Consequently, program download will affect the process and must be coordinated with the Operator, who will need to reset

some controls after the download. Unless specifically addressed in the Logic by using the *R FLG* parameter, all internal tag values will initialize to "0" when the program is started.

4.3.4 LOI Groups Download

LOI download can be performed from the EWS, from the LOI configure screen. AS/VIEW must be running for download.

5.0 U32/RCM CONTROLLER CONFIGURATION

5.1 U32/RCM CONFIGURATION FILES

Three unique files exist for each MICON controller that is configured using the MICON controller configuration utility. The three files are a linked-list file, a controller file, and a "scroll" file. The configuration utility is designed to keep these three files consistent, which is necessary for the configuration program to function and to prevent corruption or loss of configuration data.

The **linked-list file** provides linkage pointers for the program to correlate the other two files, but is an unreadable (binary) file.

The **controller file** is the file which is actually downloaded to the RCM-32 or U-32 controllers and compiled there to run the process. It is a C-language type program in ASCII format. The program is readable by experienced programmers of MICON systems, however, the lines of code are not commented and are sometimes too long to handle using normal UNIX tools (such as *vi* and *grep*).

The **scroll file** is an ASCII text file; the name is based on its use in the configuration utility. It provides a "user-friendly" list containing most of the parameters which are defined during the configuration process. Unfortunately, some of the details are omitted or truncated, so that the complete configuration cannot be rebuilt from this file alone.

Configuration filenames must follow certain conventions. The scroll and link filenames have two parts. The first part identifies the MICON controller tag (as defined in file *devices.txt*) by relating it to the controller type (RCMA, RCMD, RCMDR, RCME, RCMF, or U32) and controller number. The controller number, which matches the number on the U-32 and RCM-32 hardware, is the hardware "slot" number for which the file was developed. The second part of the identifier is the name of the controller file, which can be up to 8 characters long and can be adjusted by the user. The convention which will be used is a shorthand notation to identify the RCM, followed by the revision number which is modified when the file is changed.

syntax: [CONTROLLER TAG].[controller filename]
 example: *RCMDR_20.dr20_r0*

				revision number	
				controller number	
controller type					

The configuration files will be identified by the file name, size, date, and time stamp.

example of all three files:

scroll file:	<i>RCMDR_20.dr20_r0</i>	<i>12345 SEP10 12:41</i>
link file:	<i>RCMDR_20.dr20_r0</i>	<i>23456 SEP10 12:42</i>
controller file:	<i>dr20_r0</i>	<i>34567 SEP10 12:41</i>

When a change is implemented, the revision number in the file name will be incremented and the above identifier will change its values.

5.2 GENERAL U32/RCM CONFIGURATION RULES

Any information involved in the controller configuration files which is contained in the *"*.txt"* files **MUST** be changed by first editing the *"*.txt"* files (using *vi*), then using the Configurator to load the updated information into the controller files by deleting and re-inserting the affected steps.

WARNING: Failure to follow these rules will result in corrupting files.

- 5.2.1 Make all changes to configuration on the EWS and download to the other OP Stations.
- 5.2.2 Do not use an editor (such as *vi*) to revise the **scroll**, **linked-list**, or **controller** files.
- 5.2.3 Do not "wander" around in the Configurator program. Files can be corrupted by simply "clicking" at inappropriate places in the scroll file or the resulting popup windows. Know what you want to do, go directly there, do it, and get out. UNIX functions such as *view* or *grep* can be used to examine the files in advance to determine what needs to be done.
- 5.2.4 Do NOT use the Configurator to revise any information which is contained in the *"*.txt"* files.
- 5.2.5 Do NOT modify steps using the Configurator. Always delete the affected steps and re-insert them.
- 5.2.6 If a very simple change needs to be made to a controller file and there is a temptation to simply revise the information, go back and re-read rules 5.2.4 and 5.2.5. **THIS IS IMPORTANT!**
- 5.2.7 When entering the information involved in a function (step), do not try to correct any mistakes beyond a simple backspace (character deletion) within a particular field. Once a field has been entered, do not try to change it.
- 5.2.8 Do NOT use the up/down arrows to scroll thru MUD's when inserting a function 9 - instead select the desired MUD by entering the specific number. The up/down arrows may be used for all other tag selection functions.

- 5.2.9 After inserting a step, "save out" all the way before making another change. Use the 'Perf meter' to assure that the prior save is completed before initiating the next save or next operation. Do NOT proceed to the next save (or anything else) until the prior one is complete.
- 5.2.10 To revise an import/export list, make the change to the appropriate list, then "save out" and exit the Configurator. It may be necessary to select an "END" statement to force the saves to work properly. The full "save-out and exit" must be done before an imported tag can be used (on the next entry). Also, note that once an import statement has been added, it cannot be removed nor can the tag-list be made "blank". Thus, if there is only one tag in the import list, it must be left even if it is unused.
- 5.2.11 Even obeying all the rules, revising a MUD will corrupt the file by deleting about the last 1 & 1/2 steps of the scroll file. The simplest work around is to insert a couple of No-Op steps (Function 99) at the end of the file prior to revising the MUD. After revising the MUD, insert an END statement as far down the file as can be selected (hopefully an extra No-Op step), which deletes the remainder of the file. If the No-Ops were not inserted, re-enter any necessary deleted steps. It is strongly suggested to *diff* the scroll and controller files afterwards to assure proper change.
- 5.2.12 The sequencer utilize functions 40, 43 and 10 in series, The function 40 cannot be deleted/inserted w/o messing up subsequent step numbers. To revise the function 40, first delete the function 43/10 steps, then revise the function 40, and finally re-insert the function 43/10 steps.
- 5.2.13 Several controller files have more than 325 ISW's "configured", but those above 325 are not "initialized" in the controller file. Nevertheless, they seem to work, though there is no way to change their Tagname and it is difficult to ascertain which ones are actually spares.

5.3 GENERAL U32/RCM PROGRAM REVISION PROCEDURE

This procedure addresses normal "step-oriented" logic in the controller files. Virtual Analogs, Internal Switches, and Import/Export lists are handled a little differently in steps 5.3.8-9 below.

Since Virtual Analogs and Internal Switches do not have "steps" in the controller file, they are not Deleted. Simply selecting the tag to be updated, will bring up the new (revised) information from the imported database. If alarms are used, (must know in advance) then also "click" on the alarm button, which will bring up the new (revised) alarm information. Then proceed as normal to save all the way out, exit, and restart the Configurator prior to using the revised Tag.

Import/Export lists are handled similarly. Clicking on the list in the scroll file pops up an editor where the list can be revised. Then save out normally and restart the Configurator.

The following procedure addresses the normal case of revising the "step-oriented" logic.

- 5.3.1 Edit the revised information into the appropriate *"*.txt"* file(s). If the *"*.txt"* files are not affected proceed to step 5.2.4.
- 5.3.2 Import the revised *"*.txt"* files.
- 5.3.3 Exit and re-enter X-windows.
- 5.3.4 Move the Perf meter to a location where it will be visible while the Configurator is being used.
- 5.3.5 Assure a suitable backup is available prior to making any changes, recognizing that in spite of your most dutiful efforts, you may end up with a corrupted file. To backup a specific controller's files, be sure to get all three files:

scroll file	e.g. <i>RCMA_2.a2_r1</i>
link file	e.g. <i>RCMA_2_a2_r1</i>
controller file	e.g. <i>a2_r1</i>

A *newRev* script has been prepared to assist making a new revision of these three files, and is discussed in a later section. To use it, first use *newRev* to copy the latest revision to the desired new revision, then edit the new revision.

- 5.3.6 Open the Configurator on the file which is to be revised.
- 5.3.7 Scroll to the last statement in the file to assure it is a valid END statement and that the file is not already corrupted. If the file is already corrupted (from a prior edit), then fix the problem before proceeding with another change.
- 5.3.8 Scroll thru the file to locate the affected step. Use the scroll bar and avoid clicking on steps. Select the step to be revised, and Delete it. If the information needing to be changed is not in the *"*.txt"* file, still delete the step. (Suggest first carefully noting the values of all inputs so they can be re-entered properly - but recognize that not all information is shown in the **scroll** file, in which case the necessary information should have previously been determined from the **controller** file.)
- 5.3.9 Re-Insert the affected step, which will pickup the applicable new information from the revised *"*.txt"* file(s). Enter any additional requested information (once only) into each field. If a field is entered incorrectly, proceed to complete the entry of the remaining fields, save all the way out, and then repeat the change.
- 5.3.10 Save all the way out, using the Perf meter to assure that each save is completed before beginning another one.
- 5.3.11 If all seems well, further delete, insert & save cycles can sometimes be performed on the same file, however, the safest way is to exit and re-start the configurator. Never

change anything else when changing a MUD. Also when revising any tag definitions or import/export lists, it is necessary to exit and re-enter to re-initialize the tag lists so the new tags are found.

5.3.12 When finished editing the file, exit the Configurator. Do not attempt to edit another file before exiting.

5.3.13 If a MUD was revised, the end of the file has been corrupted. Re-enter the configurator and compare the end of the file with the pre-revision version. (Suggest using UNIX *view* and/or *diff* to examine the previous version of the scroll file.)

If steps or partial steps are missing or unaccessible, then using the configurator in the normal manner, insert a *FUNC0* (END) statement as near to the end as possible, and re-enter the missing steps - performing the normal "saving out" process.

5.3.14 Download the revised controller files to the MASTER station:

e.g: `>sendConfig a2_c` -> sends file `a2_c` to `micon2`

5.3.15 Download each revised file to the appropriate controller, compile and execute it. Compile error #1 is a timeout error, which is occasionally obtained. Check carefully that the proper file has downloaded and repeat the compile attempt. It can usually be overcome with repeated attempts and keeping network traffic low.

5.3.16 Compile error #2 indicates a software error in the controller file. Information about the error can be found in file *Oconfig/compile.nnn*, where *nnn* is the controller number. In this case, restore the prior version of the controller file, and return to the configuration process to correct the error.

5.3.17 After the new program is running, check for any "Peer-to-peer communication" alarms. Unless an RCM is down, this alarm indicates an error in the configuration, specifically in the *EXPORT/IMPORT* lists. Restore the prior version of the controller file, and return to the configuration process to correct the error.

5.4 FILE CORRUPTION PROBLEMS

File corruptions can be of several types but all relate to the scroll, link and controller files getting "out of sync".

Scroll file: ascii file, which is presented in the "scrolling window" of the Configurator. With proper knowledge, the file could be edited directly (via *vi*) to fix problems, but extreme care must be made to keep it consistent with the link file which correlates it to the actual controller file.

Link file: binary file. MICON has the capability to convert it to a ascii file and edit it to fix problems. This file correlates the Scroll file to the Controller file.

Controller file: ascii file, which is the file actually downloaded to the controllers. Sometimes the lines are too long for the *vi* editor. With proper knowledge this file could be edited directly, but also must be kept in sync with the other files. Manual editing may prevent subsequent use with the configurator.

- 5.4.1 Repair most commonly involves deleting affected portions of the file and re-entering the steps. If in-appropriate "saves" have been performed, it may be necessary to re-import the "*.txt" files to re-establish the proper on-line database.
- 5.4.2 If the scroll file cannot be pulled into the Configurator, it may be totally unrecoverable. Suggest returning to the last valid version and re-entering the subsequent changes.
- 5.4.3 Sometimes the scroll file /Configurator operation seems normal up to a certain point, but fails near the end of the file. One possible solution is to delete the end of the file, and re-enter the deleted steps. The tail of a file (actually a loop) can be deleted by inserting a function *O* (END), which deletes all subsequent steps in that loop. The deleted steps can then re-entered normally.

6.0 GRAPHICS CONFIGURATION

Graphics changes are made using A/S DRAW from the "Utl-Mnt" pull-down menu, which provides access to the DataViews editor program. MICON enhancements to DataViews provide for linking to their database. Editing of graphics is fairly straightforward and reliable. This section only focuses on a few topics which may be problematic.

6.1 GRAPHICS FILES

Graphics files define the pictorial displays which have been developed specifically for this application. The system includes several hundred graphic displays and sub-drawings. Thirty-two displays (names) are reserved for the "P&ID displays", which mimic the P&ID's and are the normal operator interface screens. Because of their special names, these screens work uniquely with the IOK. Another set of (about 200) graphics show the dynamic state of the control logic diagrams. Finally, there are several dozen sub-drawings, which are included by reference in the main graphics. Graphics filenames have a ".v" extension, and subdrawings have a ".sd" extension.

Graphics filenames are fixed and cannot change with revision number. Graphic files will be identified by the file name, size, date, and time stamp. Old revisions can be retained by giving them new names.

example:

current file:	<i>ay101.v</i>	<i>40404</i>	<i>Sep10</i>	<i>12:41</i>
old rev:	<i>ay101.96Sep10</i>	<i>40506</i>	<i>Sep10</i>	<i>12:41</i>

View files are stored in */home/Data* rather than */home/Data/Views* because *Data* was the default in prior releases. Switching to the *Views* directory would require re-entering all the subdrawing filenames used in "Dynamics", which would be a rather large undertaking.

6.2 GENERAL GRAPHICS RULES

The A/S DRAW editor works fairly well as described for basic drawing of objects. Problems are mostly involved in linking objects to dynamics. Such objects will be called "dynamic-objects".

6.2.1 Objects can only be linked to one Tag.

6.2.2 While it is possible to change the Tag associated with a dynamic-object (leaving the underlying performance the same), this process does not always work reliably. Thus copying a dynamic-object and expecting to subsequently change the linked Tag is a dubious proposition.

Copying a dynamic-object between drawings (i.e. by "Cut" and "Paste") will often result in corrupting the underlying view file so that it will not load at run-time. For this reason, copying between drawings should only be done for objects without dynamics. In the event a view-file is corrupted in this manner, the cleanest remedy is

to return to a prior good version. However, if the corrupted objects (in the view) can be identified, it is also possible to delete and reinsert them.

Most of the time, dynamic-objects can be successfully copied within the same drawing. The process is less reliable if the dynamic-object also has an Alarm linked. In the event a copied object cannot be re-assigned to a new Tag, it is necessary to either delete the object or all its dynamics and alarms, and then relink the desired dynamics.

- 6.2.3 A/S DRAW can sometimes get confused about the Tag range. The symptom is observed when trying to edit the dynamics of a series of objects. At some point, after "Dynamics" is selected, the proper tag will be identified, but the range will remain displayed as the range of the last selected tag. Trying to edit the attributes at this point is unsuccessful. The only known solution is to exit A/S DRAW and restart it.
- 6.2.4 Defining the subdrawing attribute requires entering the setpoints and full pathname for each desired change in the picture. The protocol for entering this data is VERY sensitive, and it is easy to make entries which look correct but will not function. The key (and difficulty) is in getting the initial drawing entered correctly. After selecting Dynamics, Tagname, and Subdrawing, click on the "destination box" at the left where the pathname will be displayed, then click on the "entry box" and type in the (full) *pathname* <Enter> of the subdrawing to display when the value is 0. Click again on the "destination box", then on the "Clear" button. Click again on the "destination box", then on the "entry box", and press "enter" again to set the *pathname* string as the initial drawing. At this point the initial value should be displayed at the bottom of the "destination box". If not done correctly, the proper value may be displayed but still not be properly initialized in the (unseen) database. If there is any doubt, these steps can be repeated to assure that the initial value is set. After some experience, the specific screen refresh "flash" as the filename is properly displayed will be recognized. Following setup of the initial value, entering the subsequent change values is straightforward and similar to the color attributes - specify the value where change to a new subdrawing is desired, then enter the full *pathname* of the new subdrawing.

6.3 GRAPHICS CONFIGURATION PROCESS

- 6.3.1 Select 'Sys-Mnt - A/S_Draw' to start the graphic editor.
- 6.3.2 Open the desired graphic. Both views ("*.v") and subdrawings ("*.sd") can be loaded and edited. Since the subdrawings are included by reference, a change to a subdrawing is global to all places it is used.
- 6.3.3 Add/revise the desired objects. Link the desired dynamics to the objects
- 6.3.4 Save the file.
- 6.3.5 Download graphics file to the operator stations. The graphic files are used directly by A/S VIEW, so a revised graphic will be loaded the next time that screen is requested for display. Thus a change to a single graphic can be implemented by copying the file

to all the workstations. For example, from the */home/Data* directory the following command downloads file *view.v* to all Operator Stations:

example: *>sendFile view.v /home/Data*

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7.0 GROUP CONFIGURATION

7.1 PROCESS GROUPS FILES

The process group files define which tags are co-located together on the "faceplate" displays. One file defines the arrangement of all the process groups for the OCS, and only the OCS group configuration will be controlled. Maintaining the LOI's consistent will be an implementation detail under the responsibility of the System Administrator. The group configuration will be identified by the name, size, date, and time stamp on the OCS group file:

gconfig.cfg 20202 Sep10 12:41

7.2 PROCESS GROUP CONFIGURATION PROCESS

- 7.2.1 A/S VIEW must be running to configure groups.
- 7.2.2 Select "Sys-Mnt - Group_Configure" to revise the OCS or Module Groups.
- 7.2.3 Select the desired group number(s), and enter the desired tags into the slots.
- 7.2.4 The GO-TO selections have been setup to provide return to the associated Process Graphic or access to associated Trends and Historian displays. Open GO-TO slots are available for future changes.
- 7.2.5 Save the group. Saving has been setup to require Engineer permission so that Operators cannot revise group definitions.
- 7.2.6 Group configuration may be downloaded by copying the file *Data/Dbase/gconfig.cfg* to the other OCS workstations. The revised group definitions will be used the next time a group is requested for display.

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8.0 LOI CONFIGURATION

8.1 LOI CONFIGURATION FILES

LOI groups are defined in a large number of files, one per group. These are downloaded to the U32 in each LCU, and from here to each LOI as requested by the LOI during its boot up process. As discussed in section 7.0 Process Groups, the LOI groups will not be explicitly controlled as part of the Release Version. Rather they will be maintained to be the same groupings as the Process Groups. Thus any change to Process Groups should also be made to the LOI Groups.

8.2 LOI CONFIGURATION PROCESS

- 8.2.1 A/S VIEW must be running to configure LOI groups.
- 8.2.2 Select "Sys-Mnt - LOI_Configure" to revise the LOI Groups.
- 8.2.3 Select the desired U32 where the group is contained. Remember that a single group may be included in multiple LOI's.
- 8.2.4 Select the desired group number(s), and enter the desired tags into the slots.
- 8.2.5 Save each group before proceeding to the next one.
- 8.2.6 Select "Download" to download all the groups for the LCU which is currently being displayed. Since the LOI groups reside in the U32's, they must be on-line to perform the download.

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9.0 TREND/HISTORY CONFIGURATION

9.1 PROCESS TRENDS CONFIGURATION FILE

The trend configuration file defines which tags are co-located on each trend display. Each trend can display 0-4 tags. By design, the trend groups have been organized and numbered to correspond to the graphics screens, so that related process variables are together. The file defining the trend displays will be identified by the name, size, date, and time stamp on the file, for example:

```
trendcnfg.cfg 30303 Sep10 12:41
```

9.2 HISTORIAN DISPLAY CONFIGURATION FILE

The historian configuration file defines which tags are co-located on each historian display. Each display can show 0-4 tags. By design, the historian groups have been organized and numbered to correspond to the graphics screens. However, since only selected variables are recorded in the history file, some of the historian screens do not have data available for display. The file defining the historian displays will be identified by the name, size, date, and time stamp on the file, for example:

```
histcnfg.cfg 30303 Sep10 12:41
```

9.3 TREND/HISTORY CONFIGURATION PROCESS

- 9.3.1 A/S VIEW must be running to configure Trends or History groups.
- 9.3.2 Select "Trend/Hist" and either "Trend" or "Hist", as appropriate.
- 9.3.3 Select the desired Trend or History number. Remember that the Trends and Histories should be maintained consistent. Hence, any revisions should be reviewed for applicability to both.
- 9.3.4 Enter the desired tags into the slots.
- 9.3.5 Select "Other-Ranges", and enter the ranges of the variables. Sometimes these update to the database values when a tag is entered, but other times they do not. They need to be checked each time for correctness. Consult the *ai.txt* file for full variable range; although sometimes a different range could be desired on the plot.
- 9.3.6 Colors may appear to be changeable, but will actually be reset to defaults when the screen is next loaded. Hence, no attempt should be made to select different colors (as part of configuration).

- 9.3.7 Save the Trend/History screen. Saving has been setup to require Engineer permission so that Operators cannot revise the definitions.
- 9.3.8 Trends and Histories can be downloaded by using the *sendFile* script from the */home/Data/Dbase* directory:

```
> sendFile trendcnfg.cfg    /home/Data/Dbase  
> sendFile histcnfg.cfg    /home/Data/Dbase
```

The revised definitions will take affect the next time a trend or history is displayed on that OCS.

- 9.3.9 Note that this configuration does not affect what variables are actually archived and thus available for display on the History plots. Changing which variables are (historically) recorded is accomplished by revising the applicable *"*.txt"* file.

10.0 ANNUNCIATOR CONFIGURATION

10.1 ANNUNCIATOR CONFIGURATION FILE

The annunciator configuration file defines the name of each of the possible 40 annunciator windows, which alarms will be grouped to actuate that window, and which graphic screen is to be associated. By design, the annunciators have been defined so that (where possible) each one displays all the alarms associated with a single "P&ID" graphic display.

The file which defines the annunciator groups will be identified by the name, size, date, and time stamp on the file, for example:

```
annuncnfg.cfg 10101 Sep10 12:41
```

10.2 ANNUNCIATOR CONFIGURATION PROCESS

10.2.1 A/S VIEW must be running to configure Annunciators.

10.2.2 Select "Sys-Mnt - Annunc Config" to revise the Annunciators.

10.2.3 Select the desired annunciator.

10.2.4 The right list gives the alarms currently configured to actuate the annunciator. Alarms are deleted by "clicking" on them. Tags from the left list can be added by "clicking" on them. Available tags are listed by controller number, so it is necessary to know which controller each tag is defined in.

Note that the alarm order on the right list is the same order as will be displayed to the operator. This order is (only) set by the order they were added to the list. Thus to change the order it is necessary to remove all the alarms and re-add them.

10.2.5 Save the annunciators.

10.2.6 The revised annunciator definition can be downloaded using the *sendFile* command from the */home/Data/Dbase* directory.

```
> sendFile annuncnfg.cfg /home/Data/Dbase
```

The revised definitions will take affect the next time the annunciator panel is displayed on a given OCS.

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11.0 SPARCSTATION CONFIGURATION

11.1 Solaris SOFTWARE

The Solaris operating system is loaded identically on all four operator stations, except for minor adjustments to provide unique addresses for each station. Only recovery capability is needed. Recovery is most expeditiously provided by copying from one station to another, nevertheless, a tape backup will also be provided. For maintenance convenience, the station-unique files have been collected to a backup directory in */home/micon#.bak* and further downloaded to the EWS. Thus a *dump* of the EWS provides all the information necessary to restore any of the workstations. (Reference *bakUniqFiles* script.)

11.2 Solaris CONFIGURATION

Each SparcStation has unique network and printer assignments. These minor differences are reflected in a few files scattered around the system, mostly in */etc*. Reference the script *bakUniqFiles* for a full listing of the files, and the UNIX documentation for file specifics. This section only mentions those which need additional clarification.

11.2.1 */etc/printcap*

Identifies which stations have printers connected, versus those which send print requests over the network to the remote printer station. Some flags in *ASV_CUSTOMER_SETTINGS* are also related.

11.2.2 */etc/passwd*

The AS/View system is owned by the *micon* account, which is used by all users to login to UNIX on both the OCS and EWS. As shipped, MICON does not provide password control the *root* account, however, a password has been added to restrict access to UNIX itself.

11.2.3 */etc/hostname.le0 & hostname.le1*

Separate networks provide the control room inter-CPU communications and the GPLI connection to the U32's. Some flags in the *ASV_CUSTOMER_SETTINGS* file must agree with these settings.

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12.0 AS/VIEW INSTALLATION

12.1 A/S VIEW SOFTWARE

A/S VIEW is loaded identically on all four SparcStations, except for minor addressing changes. Recovery is most expeditiously accomplished by copying between stations, with minor adjustments. Note that only the EWS and Operator Station-2 have tape drives.

12.2 A/S VIEW INSTALLATION ISSUES

This section discusses general setup issues that are involved in installing the AS VIEW system.

12.2.1 /home/miconview#/micon/ASV_CUSTOMER_SETTINGS

On AS/VIEW startup, the *ASV_FACTORY_SETTINGS* file is processed first, then the *ASV_CUSTOMER_SETTINGS* file. The *ASV_FACTORY_SETTINGS* file should never be changed, however, desired adjustments can be made in *ASV_CUSTOMER_SETTINGS* (which is a parallel file). Many misc flags are included which define system performance. Also some parameters, such as network addresses, must be consistent with other UNIX files.

Only Op Station 2 is configured for Data History, since it is the only one which has the tape drive.

Several "Group Threshold" parameters define the screen update frequency by specifying a "%-change" prior to updating. For performance reasons, this parameter cannot be set any smaller than 0.1% which is 1/1000 of the defined range. Parameters with a large range (for example 100,000) will then not update for small changes (<100 in this example), which can be disconcerting for the operator. Most of the parameters with these large ranges are virtual-analogs, such as totalizers or radiation readouts. Since virtual-analogs can store values larger than their defined range, the defined ranges on many of these parameters has been reduced to improve screen update. The only apparent down-side to this is that the bar-charts on the group displays will "peg-high" at the defined range.

12.2.2 /home/DataViews97/etc/license.dv

This license file is required for operation of DataViews, and is unique to each processor and DataViews combination. Call MICON (rather than VI-Corp) for problems with the DataViews license, as they provide the authorization sequences for their OEM applications.

12.2.3 /var/spool/cron/crontabs/root

AS/View can be setup (via *ASV_CUSTOMER_SETTINGS*) to perform internal time synchronization between stations, but this requires removal of the password on the *root* account. To maintain a *root* password, time synchronization has been setup via a *cron* entry to query the time from the *MASTER* station on every hour.

12.3 ADMINISTRATIVE CONTROLS

The system is setup for all users of AS/View or the configuration utilities to log into UNIX on the same account, which thus limits access to basically the AS/View system. Further restrictions are placed using the AS/View login features, which provides for "accounts" and "users" within each account. The system has not been setup to define individual users, but rather groups of users, which share the same password and account capabilities. Six users are defined - *system*, *engineer*, *supervisor*, *operator*, *trainee*, and *technician* - which are grouped into three accounts - *engineers*, *operators*, and *technicians*. The *system* user has full access and is used to setup administrative controls. *Supervisor*, *operator*, and *trainee* are members of the *operators* group, with progressively less permissions. The *technician* has not been implemented.

Each user can be given limited capabilities, but they mostly limit access to the options on the top menu bar of AS/View. A couple of additional limitations allow controlling access to the pop-ups for operating the hand switches, which are the operator controls. This, however, is an all or nothing access, with no way to limit access to specific operator controls. There is a feature in the DataViews editor which could be used to limit access to a particular graphic, but this would preclude unauthorized users from even accessing the graphic to look at it. To repeat, there is no simple way to split the operator controls between two (or more) groups of users. The only method apparent would be to create separate sets of screens, which are only accessible by their respective users. This would require double the number of accounts and users, each with access to only their respective set of screens. It would also be necessary to restructure the Group displays so the appropriate Tags are only accessible by one user. Fundamentally, the system was not designed to handle this arrangement, and it not recommended.

Another problem is that the alarms can be acknowledged by any user. There is no provision for limiting access to by user.

13.0 U32/RCM DOWNLOADING & TROUBLESHOOTING

13.1 U32/RCM HEALTH MONITORING

There are several alarms associated with monitoring the health of the controllers. When problems arise, it is helpful to understand what generates each alarm, and likely system responses. The four alarm types are:

<u>Alarm Types:</u>	<u>Generated-by:</u>
1) Controller Offline	SYSTEM
2) Peer-to-Peer Communications Failure	SYSTEM
3) Communication Alarm	LOGIC
4) FieldBus Monitor	LOGIC

Only the FieldBus failures are used in the Logic to switchover to backup systems, The others are alarm-only.

13.1.1 Controller Offline Alarm

Controller Offline alarms are generated by the AS/VIEW system, and indicate that AS/VIEW (i.e. the OCS/EWS stations) cannot communicate with the indicated module. This error does not depend upon whether the module is running any program - i.e a healthy module with NO user program, does NOT generate this alarm. The alarm will be generated for a failed module (red FAIL lite ON) or a failed network connection to the module. The failed network can be either the Token-ring or (for an RCM) a Fieldbus. Thus network failures often produce a flurry of these alarms, and the pattern can help diagnose what is wrong.

13.1.2 Peer-to-Peer Communication Alarm

Peer-to-Peer Communication alarms are generated by a controller which has not received an updated value for an IMPORT'ed Tag. Thus this alarm is only generated when a user program is running. The controller number in the alarm message is probably healthy (unless a recent configuration error has specified an incorrect Tag), but is not getting updated information to perform its task. Such controllers continue to operate with the last information received. On the other hand, failure of a program which has no EXPORTS, would not yield any alarms. Peer-to-peer alarms generally indicate network problems, occur in a flurry of alarms, and the pattern can help diagnose what is wrong.

Peer-to-peer alarms can also be generated from controller configuration errors with respect to IMPORT/EXPORT operations. This problem can be distinguished from the above because the alarm persists even when the system is running stably. There is no direct way of determining what Tag is not being received or which controller is failing

to *EXPORT* the Tag. Start by examining recent changes. To find all the Tags that are imported into a particular controller, *grep* the file for the pattern "...". Then search each originating file for an appropriate *EXPORT* of that Tag.

13.1.3 Communications Alarms

Communications alarms are generated by custom logic configured in the U32/RCM's. (Reference Y075-Y079, and graphic *Comm.v.*) Basically, each U32 monitors its subordinate RCM's by testing how recently a variable has been updated over the Fieldbus network. In addition, for LCU's 1 & 2, a couple of the subordinates also monitor their U32; and, finally, U32_1 and U32_12 also monitor each other. Clearly this requires the user programs to be running in both the U32's and RCM's. Comm Alarms generally occur because of 1) a non-running user program, or 2) Fieldbus overload or failure. Note that a Token-ring failure would NOT generate this alarm, except for the U32_1 to U32_12 cross-tie.

13.1.4 Fieldbus Alarm

Fieldbus alarms are generated by custom logic configured in the U32/RCM's for LCU's 1 and 2 (only). (Reference Y001, Y007, and graphic *FBus.v.*) For critical controllers, physical hardware outputs are toggled and monitored by other controllers to assure health of these controllers and their programs. Fieldbus failures are used to switchover to backup systems. Note, however, that a Token-ring failure will NOT generate any Fieldbus alarms.

13.2 U32/RCM INSTALLATION

Occasionally, following some system perturbation, a controller may halt (FAIL lite ON), lose its program, or otherwise become "confused" about "who" they are. This section describes recovery steps to restore the modules to "basic recognition" on the network, so that subsequent program downloading can be performed.

13.2.1 Install U32's First

Applicable U-32's must be running before communicating with its subordinate RCM's, so first get the U-32's healthy.

13.2.2 Device Definition

If the module is not failed (see front panel lites), communications with a non-reporting module can often be re-established by simply bringing up the "Device-Definition" screen. If the module is not found, try pushing the Push-to-Activate button on the module, and re-assigning the module ID. Device-Definition is best performed without AS/View running.

13.2.3 Module Reset

If a Device-Definition alone does not work, try pulling the module out and re-plugging it. May need to retry the Push-to-Activate routine afterwards.

13.2.4 Master Module Reset

If neither of the above work, try a master module reset, which is the same process as would be used to install a new (spare) module. This is accomplished by pulling the module and re-plugging it while simultaneously (carefully) holding-in the Push-to-Activate button (see caution below about this switch). For the U32's, always do both backup and primary (in that order), one after the other. After a master reset the programs must be completely reloaded.

13.2.5 Hardware Board Reset

If there is suspicion that the master reset function is not working (which is a board failure), the capacitor on the board can be shorted to perform the same function.

13.2.6 Push-to-Activate Switch

The "Push-to-Activate" switches on the front of the U32's and RCM's can "stick" in the "in" position if pressed too hard. This is a particular concern on the U32's because it defeats the designed redundancy of the U32's. Specifically, if the backup is "stuck-in", then it cannot accept control if the primary fails and the designed redundancy is voided. The only known indication of the problem is how the switch felt when it was last pushed.

The switch is a delicate DIP switch which needs only a small force to operate, but it does have a verify definite detent (click feel) which can be felt on both the in and out motions. A mechanical pencil, with the lead retracted, works well to push the switch; a ball point pen does not work well because it tends to slip off and does not give a good feel of the detent operation. If both the "push-in" and "release-out" detents are felt, then all is well. If the switch doesn't seem to want to depress, it may be already stuck; it can sometimes be freed with a small, gentle rotating motion. To assure proper conditions, activate the backup and then back to primary, verifying proper "feel" of the switches on both modules. If properly operated (gentle force), the switch operates reliably and does not stick.

13.3 U32/RCM PROGRAM LOADING

Modules must be recognized using Device Definition prior to downloading. The applicable U32 must be communicating in order to download programs to any of its subordinates RCM's.

13.3.1 Download Only Primary U32's

Do NOT download a U32 while its backup controller is active. This produces an insidious system failure mode wherein modules report inconsistently to the various

OCS stations. If this is done, recover by performing hardware master resets of both the primary and backup. May need to reset all U32's and GPLI's, not only the one affected. DO NOT DOWNLOAD A U32 WHILE ITS BACKUP CONTROLLER IS ACTIVE.

13.3.2 Delete Old Program

Using the Utilities-Download program, check first for any operational program in the controller. Before downloading a new program, Delete any program currently in the controller. Do not start a program currently in the controller unless you know it has never been run before (executed). A program which has been halted and restarted, will not properly report its alarms.

13.3.3 Download New Program

Download and start the new program. For confidence of proper operation, the Download, Compile, and Execute steps can be done individually and checked for completion by using "Dir". Sometimes a step will fail on the first attempt but work if tried again. Compile Error #1 is a timeout problem and will probably work properly if tried again with lower network traffic.

13.3.4 Download LM Table and LOI Groups

If a U32 has been thru a Master Reset, then the LM-table and LOI-groups must also be reloaded after downloading the new controller file. (They can also be reloaded anytime there is suspicion that they need to be).

To download the LM-Table, select the "Utilities-LM Table" program, select the desired U32, and select download.

To download the LOI-Groups, select the "Utilities-LOI Configure" program, select the desired U32, increment to a valid group number (e.g.1), and select download.

13.4 MISC PRECAUTIONS

This section discusses miscellaneous issues which may not addressed elsewhere.

13.4.1 Controller Restart

If a controller is halted and restarted, it will not properly report its alarms. To restore proper operation, delete its program, re-download, compile and execute.

13.4.2 Alarm Deletion

Avoid deleting alarms. This seems to cause subsequent problems in recognizing the alarm when it re-occurs.

13.4.3 Alarm Lockin

"U32 failure" alarms occasionally can become "locked in". They can be cleared by switching control between the primary and backup by pressing the "Push-to-Activate" button.

13.4.4 RCM_49 Fieldbus Terminators

Pulling the fieldbus on RCM_49 kills communications to all of LCU5 because it lifts the termination resistor on RCM_49. LCU6 does not exhibit the same trait, presumably because of the shorter length of the fieldbus connection.

13.4.5 OCS Restart

After a powerdown of RCM's, the Sparcstations may not recognize some of the RCM's when power is restored. First, use the "RCM-download" facility to verify that the RCM's are actually up and are still running their programs. If the RCM's are healthy, then the clean approach is to shutdown AS/View, perform a Device_Definition, and restart AS/View. Sometimes AS/View will recover (or appear to recover) by doing the Device_Definition while it is running, however, it is suspected that this does not do a complete recovery - a full restart should be performed as soon as reasonable.

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14.0 TOOLS, TECHNIQUES, AND METHODOLOGIES

There are no additional tools, techniques, or methodologies required for maintaining the system other than those supplied as part of the commercially available MICON and Solaris software. However, to facilitate some routine activities, several utility UNIX scripts have been written to simplify these operations. These are documented in this section.

14.1 SCRIPT *releaseVer*

The *releaseVer* script generates a listing of the current configuration of the software. This is intended for configuration documentation in accordance with WHC-SD-WM-CSCM-011, "Computer Software Configuration Management Plan".

14.1.1 *releaseVer* Usage

Script location: */home*

```
> releaseVer          -> generates the listing to stdout
> releaseVer filename -> generates the listing to file filename
```

14.1.2 *releaseVer* Synopsis

If *\$I* is not specified, the list is generated to *stdout*. If *\$I* is specified, the script is re-executed, redirecting the *stdout* to the desired file.

The script has a fixed set of filenames/patterns to perform *ls* commands on to generate the listing. Thus if varying additional filenames are added, revisions could be necessary.

14.1.3 *releaseVer* Listing

```
if [ $I ]; then
    echo W-030 Release Version: $I , created `date` >ver.$I
    echo  >>ver.$I
    exec $0 >>ver.$I
    exit
fi

echo OS Version: `grep SunOS /usr/adm/messages | tail -1 | cut -d\
-f6-8`
echo A/S VIEW Version: `cat /home/Run/version.sys`
echo

echo Dbase Files ...
```

```

cd /home/Data/Dbase
ls -l ai.txt ancncfg.cfg ao.txt devices.txt di.txt do.txt gconfig.cfg
gp.txt
ls -l gp1i*.txt histcnfg.cfg isw.txt lp.txt mdi*.txt
ls -l trendcnfg.cfg up.cfg user.txt va.txt vdi.txt

echo
echo Graphic Files ...
cd /home/Data
ls -l *.v
ls -l *.sd

echo
echo Config Files ...
cd /home/Data/Oconfig
for i in 1 12 23 34
do
    config=`ls U32*_$.i.* | tail -1 | cut -f2 -d.`
    echo $config:
    ls -l *$config
done
for i in 2 3 6 7 9 10 13 14 17 18 20 21 24 28 31 35 36 39 40 45 46 47 48
    49 50 51 52 53 54
do
    config=`ls RCM*_$.i.* | tail -1 | cut -f2 -d.`
    echo $config:
    ls -l *$config
done

```

14.2 SCRIPT *spareIS*

This script assists in locating spare Internal Switches (IS's) in the controller files. While the other Tags types have been given "ergonomic" names when used, most of the IS's are used for animating the Logic Graphics and have been left as their generic names, e.g. IS012125. Thus locating spares becomes an exercise in searching the controller file(s) for used Tags, hoping to find unused ones - which is a tedious process. Note that unused Tags may be referenced in the controller file because they are "declared" but not used. The *spareIS* script assists in finding spares by searching for IS Tags which are used a limited number of times, which may be spare Tags.

CAUTION: Always specifically examine all references to a Tag prior to assuming it to be actually unused. This script also detects valid usages.

CAUTION: Some lines in some controller files are longer than can be handled by the "grep" utility, so that references occurring near the end of the lines can be missed.

CAUTION: Lines in the scroll files are truncated at 80 characters, so that references occurring in long lines can be missed.

14.2.1 *spareIS* Usage

Script Location: `/home/Data/Oconfig (alias=cfg)`

The script can be used in other ways, but is most useful as discussed below, based upon the normal number of times an unused tag will be referenced in the controller and scroll files. Note however, that IS's over a certain number may not have been "pre-declared" and thus may not be referenced at all (but can still be used, with some restrictions).

Controller files: Unused tags would typically only be referenced once in the controller files, and would likely be found with the following command:

```
> spareIS 1 controller_file
```

Scroll files: Unused Tags would typically be referenced twice in the scroll files, and would likely be found with the following command:

```
> spareIS 2 scroll_file
```

CAUTION: Always search both files and examine all hits prior to ascertaining that a tag is available as a spare.

14.2.2 *spareIS* Synopsis

The script uses *grep* to select lines containing the IS pattern, then inserts a `<CR>` to place each reference on a new line. After deleting the "extra stuff" at the end of the line, the lines should have only the IS tags on them (though some "stuff" has been observed to bleed through). Finally, the lines are *sorted* and counted (using *uniq*), and only those tags appearing the specified number of times are output.

14.2.3 *spareIS* Listing

```
#!/usr/bin/sh
grep IS $2 | sed 's/IS/
IS/g' | grep "IS[0-9]" | cut -f1 -d. | cut -f1 -d";" | cut -f1 -d"? " | cut -f1
-d=" " | sed 's/[ ]*$// ' | sort | uniq -c | grep "$1 " | more
```

14.3 SCRIPT *newRev*

The *newRev* script provides rudimentary support for version management of the controller configuration files. Basically, it supports 1) listing what versions are currently on disk and 2) copying to a new version. These activities are somewhat tedious because of the three files (scroll, link, and controller files) associated with each version, and the need to keep them consistent. Thus the script assures that all three are present, and assures consistency of copying them to a new version.

14.3.1 *newRev* Usage

Script location: *home/Data/Oconfig* (alias=*cfg*)

Following are typical commands:

```
> newRev                -> show usage options
> newRev -l RCMA_3      -> list available versions for RCMA_3
> newRev -t RCMA_3 b c  -> show what would be copied
> newRev RCMA_3 b c     -> same as above ("-t" option is default)
> newRev -x RCMA_3 b c  -> actually copy rev b to rev c
```

14.3.2 *newRev* Synopsis

Approximately the first half of the script is involved in parsing the input and generating the associated filenames needed. Parameter *\$1* is the *device.txt* name of the module. From this the "rev-name" is generated. For example *RCMA_3*, rev *b* would translate to a rev-name of *a3_b*; and *U32_12*, rev *r1* to *u12_r1*.

If a listing is desired ("-l" option), this is performed and the script exits without performing any other activities.

For other options, checks are first made to confirm existence of the source files and absence of the destination files. This script will not copy over existing files.

Finally, the appropriate files are either copied, or reported as files that would be copied.

14.3.3 "newRev" Listing

```
#!/usr/bin/sh
```

```
USAGE="Usage: $0 [-ltx] device oldrev newrev\n
\t-l => list revs available, requires device only\n
\t-t => only report what would be copied (default)\n
\t-x => actually perform the copies\n
\tdevice => RCM or U32 device name, e.g. RCMA_3 or U32_1\n
\toldrev => source rev to copy from, e.g. a or 1\n
\tnewrev => new revision, e.g. b or 2"
```

```

set -- `getopt ltx $*`
if [ $? != 0 ]; then
    /usr/5bin/echo $USAGE
    exit 1
fi

COPY="F"; LIST="F"; ERROR="F"
for i in $*; do
    case $i in
        -l) LIST="T"; shift;;
        -t) COPY="F"; shift;;
        -x) COPY="T"; shift;;
        --) shift; break;;
    esac
done

if [ $# -lt 1 ]; then
    /usr/5bin/echo $USAGE
    exit 1
fi

slot=`echo $1 | sed 's/U32//' | sed 's/[A-Z_]*/'`
#echo "slot number = $slot"

modtype=`echo $1 | cut -c1`
#echo "module type = $modtype"
if [ $modtype = "R" ]; then
    rcmttype=`echo $1 | cut -c4 | sed 's/[0-9]//g' | sed 's/_/' | sed
'y/ADRF/adrf'`;
    # echo rcmttype = $rcmttype;
    oldrev=$rcmttype$slot_"$2;
    newrev=$rcmttype$slot_"$3;
elif [ $modtype = "U" ]; then
    rcmttype="u" # used for listing below
    oldrev=u$slot_"$2;
    newrev=u$slot_"$3
else
    echo unknown module type = $modtype;
    exit
fi
#echo oldrev=$oldrev, newrev=$newrev.

#
# A list request just does an ls of the appropriate files.
#
if [ \($LIST = "T" \) -o \($# -lt 3 \) ]; then
    ls -l $1[_]* $rcmttype$slot[_]*

```

```

if [ $rcmtype = "u" ]; then
    ls -l u32 _ "$slot"
else
    ls -l rcm$rcmtype _ "$slot"
fi
COPY="F"
exit
fi

#
# test for existence of source files
#
if [ ! -f $1.$oldrev ]; then
    echo "***source file $1.$oldrev does not exist"
    ERROR="T"
fi
if [ ! -f $1_.$oldrev ]; then
    echo "***source file $1_.$oldrev does not exist"
    ERROR="T"
fi
if [ ! -f $oldrev ]; then
    echo "***source file $oldrev does not exist"
    ERROR="T"
fi

# ...and non-existence of destination files
if [ -f $1.$newrev ]; then
    echo "***destination file $1.$newrev already exists"
    ERROR="T"
fi
if [ -f $1_.$newrev ]; then
    echo "***destination file $1_.$newrev already exists"
    ERROR="T"
fi
if [ -f $newrev ]; then
    echo "***destination file $newrev already exists"
    ERROR="T"
fi

#abort copy if errors occurred
if [ $ERROR = "T" ]; then
    COPY="F"
    echo "*****Errors in request, Files not copied.*****"
fi
if [ $COPY = "T" ]; then
    echo Copying ...
else

```

```

    echo Would copy ...
fi

echo ... $1.$oldrev to $1.$newrev
if [ $COPY = "T" ]; then
    cp $1.$oldrev $1.$newrev
fi

echo ... $1_$oldrev to $1_$newrev
if [ $COPY = "T" ]; then
    cp $1_"$oldrev $1_"$newrev
fi

echo ... $oldrev to $newrev
if [ $COPY = "T" ]; then
    cp $oldrev $newrev
fi

```

14.4 SCRIPT *sendConfig*

The "sendConfig" script automates the activity of sending a new version of a controller configuration file from the EWS to micon2, which has been setup to be the MASTER - i.e. the station from which downloads are made. Note that only the "controller file" is sent, since it is the only one required to be downloaded. However, this will make the set of configuration files on micon2 inconsistent. This script is only applicable for changes which do NOT affect the database.

14.4.1 *sendConfig* Usage

Script location: */home/Data/Oconfig* (alias = *cfg*)

> *sendConfig a3_c* -> sends the three config files for *RCMA_3*, rev c

14.4.2 *sendConfig* Synopsis

The script first checks for existence of a version identifier parameter (*\$1*). Note that this does not actually confirm existence of this pathname on the destination, only that the script has been given a parameter to work with. Next, the appropriate filenames for the three files are generated, and then the files are downloaded. If *\$1* is an invalid parameter, the script will just generate 3 errors regarding file not found.

14.4.3 *sendConfig* Listing

```

if [ ! -f $1 ]; then
    echo $1 does not exist.
    exit

```

```
fi
```

```
type=`echo $1 | cut -c1`
if [ $type = "u" ]; then
    module=`echo $1 | cut -f1 -d'_' | sed 's/u/U32_/'`
elif [ $type = "a" ]; then
    module=`echo $1 | cut -f1 -d'_' | sed 's/a/RCMA_/'`
elif [ $type = "f" ]; then
    module=`echo $1 | cut -f1 -d'_' | sed 's/f/RCMF_/'`
elif [ $type = "d" ]; then
    module=`echo $1 | cut -f1 -d'_' | sed 's/dr/RCMDR_/' | sed
's/d/RCMD_/'`
fi
```

```
rcp -p $1 micon2:/home/Data/Oconfig
rcp -p $module.$1 micon2:/home/Data/Oconfig
rcp -p $module_"$1 micon2:/home/Data/Oconfig
```

14.5 SCRIPT *sendFile*

Script *sendfile* simplifies the activity of sending any single file from EWS to all three OCS stations. This could be done, for example, to download a new version of a graphic screen, group definition, or annunciator. This script is not applicable for changes which affect the database.

14.5.1 *sendFile* Usage

Script locations: /home/Data (alias=*data*)
 /home/Data/Dbase (alias=*dbase*)

> *sendFile filename /home/Data* -> sends *filename* to the /home/Data directory of
 all three OCS's

14.5.2 *sendFile* Synopsis

Simply performs three *rcp*'s to download the files. If \$1 is invalid, three "file not found" errors are generated. If \$2 is invalid, the transferred file will end up in the "login home" directory on the destination machine, e.g.
 /home/Data/miconview/micon/miconview2.

14.5.3 *sendFile* Listing

```
if [ $# -lt 2 ]; then
```

```

    echo no destination specified
    exit
fi

```

```

rcp -p $1 micon2:$2
rcp -p $1 micon11:$2
rcp -p $1 micon12:$2

```

14.6 SCRIPT *removeData*

Downloading a revised database (to the OCS) requires deleting the */home/Data* directory on each OCS station. This script minimizes the risk of deleting undesired files with a wayward *rm* command. Also, if it is never installed on the EWS, then this approach provides some protection against accidentally deleting */home/Data* on the EWS (which should never be done).

14.6.1 *removeData* Usage

Script location: */home*, on OCS ONLY!!

> *removeData* -> will remove */home/Data* directory

14.6.2 *removeData* Synopsis

The script simply issues the necessary recursive *rm* command to remove the *Data* directory and all subdirectories. The unaliased "*\rm*" form is used because the normal *rm* command has been aliased to query for each file.

The *removeData* script should be installed in the */home* directory of each OCS station but, for safety reasons, should NOT be kept anywhere on the EWS.

14.6.3 *removeData* Listing

```

if [ `hostname` = micon14 ]; then
    echo Do NOT delete Data on EWS
    exit
fi

cd /home
\rm -r /home/Data

```

14.7 SCRIPT *downloadData*

This script facilitates the process of downloading a new version of the */home/Data* directory, to install a database change.

14.7.1 *downloadData* Usage

Script location: */home*

> *download hostname* -> downloads new database to *hostname*, where
hostname could be *micon2*, *micon11*, or *micon12*

Do not overwrite */home/Data* on the EWS.

14.7.2 *downloadData* Synopsis

Simply performs the applicable *rcp* command to transfer */home/Data* to the desired OCS station. The */home/Data* directory on the destination machine should have already been removed, as for example by the *removeData* script.

14.7.3 *downloadData* Listing

```
if [ $1 ]; then
    echo Downloading $1...
    rcp -pr /home/Data $1:/home/Data
else
    echo Usage: $0 destinationSystem
fi
```

14.8 *SCRIPT bakUniqFiles*

Most of the files on the four systems are common, so that a master backup (system *dump*) does not need to backup all stations if the files "unique" to each system are collected. This script copies the unique files to a backup directory. See *collectUniq* for moving the files to the EWS, where a system dump can be performed.

14.8.1 *bakUniqFiles* Usage

Script location: */home*

On each OCS station, issue the following command as superuser:

> *bakUniqFiles* -> copies the unique files to backup directory

14.8.2 *bakUniqFiles* Synopsis

The backup directory is named by obtaining the *hostname* of the current system. The script then simply has a fixed list of files which are copied into the backup directory.

Since a few of the files are owned by *root*, it is necessary to perform the command as superuser. To facilitate subsequent copying of the files, their permissions are opened up to include all users. In the event it is necessary to use these backup files to customize a rebuilt workstation, assure that the file permissions are adjusted appropriately as required (per the default files).

14.8.3 bakUniqFiles Listing

```
computer=`hostname`
bakdir=/home/$computer.bak
if [ ! -d $bakdir ]; then
    mkdir $bakdir
fi

cd $bakdir
cp /etc/hosts .
cp /etc/fstab .
cp /etc/printcap .
cp /etc/passwd .
cp /etc/gettytab .
cp /etc/ttytab .
cp /etc/rc.local .
cp /etc/uucp/Devices .
cp /etc/uucp/Systems .
cp /etc/remote .
cp /etc/ethers .
cp /etc/hostname.le0 .
cp /etc/hostname.le1 .
cp /home/DataViews97/etc/license.dv .
cp /var/spool/cron/crontabs/root .

num=`echo $computer | sed "s/[a-z]*/"``
home=/home/miconview$num/micon/
cp $home/hosts.dat .
cp $home/.cshrc .
cp $home/ASV_CUSTOMER_SETTINGS .

# Need to give broader permissions on the following for copying
# Restore proper permissions when installing.
chmod ugo+rw Systems
chmod ugo+rw root
chown micon *
```

14.9 SCRIPT collectUniq

This script collects the directory of "unique files" from each OCS station, copying them to the EWS where they can be conveniently dumped to a backup tape.

14.9.1 *collectUniq* Usage

Script location: */home*

> *collectUniq* -> copies OCS files to EWS

14.9.2 *collectUniq* Synopsis

This script copies specific directories where the files "unique" to each workstation have previously been placed, for example, by the *bakUniqFiles* script. It can be performed as user *micon* because the permissions were opened up by the *bakUniqFiles* script.

14.9.3 *collectUniq* Listing

```
rcp -pr micon2:/home/micon2.bak .  
rcp -pr micon11:/home/micon11.bak .  
rcp -pr micon12:/home/micon12.bak .
```

ATTACHMENT A
MICON AUTOMATION SYTEM
DISCRETE INPUTS

Table Field Descriptors

RCM		An integer value identifying the Micon Remote Controller Module
Pnt		An integer value identifying the Point number of the Controller
Tag Name		A character string identifying the variable name
Description		A character string describing the variable
Hist	scan	Data historian scan rate -- a floating point number
	def	Data historian definition - an integer value
Alarm	p	Alarm priority - integer value ¹
	lo	Alarm when this tag is a 0 (false state) - a boolean value
	hi	Alarm when this tag is a 1 (true state) - a boolean value
Color	lo	Tag state 0 color when not in alarm
	hi	Tag state 1 color when not in alarm
Description	low	Tag state 0 descriptor -- character string
	hi	Tag state 1 descriptor -- character string

¹ 0=normal "Dim grey", 1=urgent "Red", 2=caution "Yellow", 3=information "White".

² 0=Black, 1=Red, 2=Green, 3=Yellow, 4=Blue, 5=Magenta, 6=Cyan, 7=White, 8=Dim Grey, 9=Wheat, 10=Pink, 11=Lt. Green, 12=Lt. Blue, 13=Brown, 14=Aqua, 15=Orchid.

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
2	1	DI0201	DI0201 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
2	2	DI00202	DI00202	0	0	0	0	0	2	3	OFF	ON
3	1	DI0301	DI0301 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
3	2	DI00302	DI00302	0	0	0	0	0	2	3	OFF	ON
6	1	ZS AZ K18 1AA	PVCdsrInDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
6	2	ZS AZ K18 1AB	PVCdsrInDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
6	3	ZS AZ K18 1BA	PVCdsrOtDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
6	4	ZS AZ K18 1BB	PVCdsrOtDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
6	5	ZS AZ K18 1CA	PVCdsrByDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
6	6	ZS AZ K18 1CB	PVCdsrByDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
6	7	ZS AZ K1 3A	PVCsovrADprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
6	8	DI0608	DI0608 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
6	9	DI0609	DI0609 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
6	10	ZS AZ K1 1AA	PVHtrAInDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
6	11	ZS AZ K1 1AB	PVHtrAInDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
6	12	ZS AZ K1 2AA	PVHtrAOtDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
6	13	ZS AZ K1 2AB	PVHtrAOtDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
6	14	DI0614	DI0614 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
6	15	DI0615	DI0615 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
6	16	YS AZ K12 1A	PVHtrA Status	0	0	0	0	0	4	7	OFF	ON
6	17	YS AZ K12 1A1	PVHtrA RemLoc	0	0	3	1	0	7	2	LOCAL	REMOTE
6	18	DI0618	DI0618 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
6	19	YS AZ K15 1AF	PVFanA VsdSts	0	0	2	1	0	3	2	FAULT	NORMAL
6	20	YS AZ K15 1A1	PVFanA RemLoc	0	0	3	1	0	7	2	LOCAL	REMOTE
6	21	ZS AZ K15 1A1	PVFanAInDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
6	22	ZS AZ K15 1A2	PVFanAOtDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
6	23	ZS AZ K15 1A3	PVFanA VnsOpnLS	0	0	0	0	0	4	7	CLOSED	NOT CLS

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
6	24	DI0624	DI0624 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
6	25	DI0625	DI0625 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
6	26	DI0626	DI0626 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
6	27	DI0627	DI0627 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
6	28	DI0628	DI0628 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
6	29	DI0629	DI0629 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
6	30	DI0630	DI0630 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
6	31	JAX 1 PS2 1	Lcu1 PwrSup2	0	0	2	1	0	3	2	FAULT	ON LINE
6	32	DI00632	DI00632	0	0	0	0	0	2	3	OFF	ON
7	1	XA AZ EPRG 1	DslGen AlmSts	0	0	2	0	1	2	3	NORMAL	FAULT
7	2	XA AZ EPRUPS 1	Ups1 Status	0	0	2	1	0	3	2	FAULT	NORMAL
7	3	YS AZ EPR 1A	XfrSw1 NormLS	0	0	0	0	0	4	7	NOT NORM	NORMAL
7	4	YS AZ EPR 1B	XfrSw1 StdbyLS	0	0	2	0	1	2	3	NT STDBY	STANDBY
7	5	DI0705	DI0705 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
7	6	LAL AZ EPRTK 1	DslFuel LvlLo	0	0	2	1	0	3	2	LOW	NORMAL
7	7	LALL AZ EPRTK 1	DslFuel LvlLoLo	0	0	2	1	0	3	2	LOW-LOW	NORMAL
7	8	YS AZ EPRG 1	DslGen OpSts	0	0	2	0	1	2	3	OFF	ON
7	9	DI0709	DI0709 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
7	10	ZS 702 K2 6AA	StkRmIn DprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
7	11	ZS 702 K2 6AB	StkRmIn DprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
7	12	ZS 702 K2 6BA	StkRmOt DprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
7	13	ZS 702 K2 6BB	StkRmOt DprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
7	14	ZS 702 K2 7AA	E/IRmAInDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
7	15	ZS 702 K2 7AB	E/IRmAInDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
7	16	ZS 702 K2 7BA	E/IRmAOTdprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
7	17	ZS 702 K2 7BB	E/IRmAOTdprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
7	18	DI0718	DI0718 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
7	19	DI0719	DI0719 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
7	20	DI0720	DI0720 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
7	21	DI0721	DI0721 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
7	22	DI0722	DI0722 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
7	23	DI0723	DI0723 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
7	24	DI0724	DI0724 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
7	25	DI0725	DI0725 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
7	26	XS RCM A2 1A	Rcm-A2 Status	0	0	0	0	0	7	7	OFF	ON
7	27	XS RCM A3 1A	Rcm-A3 Status	0	0	0	0	0	7	7	OFF	ON
7	28	XS RCM D6 1A	Rcm-D6 Status	0	0	0	0	0	7	7	OFF	ON
7	29	XS RCM DR9 1A	Rcm-Dr9 Status	0	0	0	0	0	7	7	OFF	ON
7	30	XS RCM DR10 1A	Rcm-Dr10Status	0	0	0	0	0	7	7	OFF	ON
7	31	JAX 1 PS1 1	Lcu1 PwrSup1	0	0	2	1	0	3	2	FAULT	ON LINE
7	32	DI00732	DI00732	0	0	0	0	0	2	3	OFF	ON
9	1	DI0901	DI0901 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
9	2	DI0902	DI0902 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
9	3	DI00903	DI00903	0	0	0	0	0	4	7	FALSE	TRUE
9	4	DI00904	DI00904	0	0	0	0	0	2	3	OFF	ON
9	5	DI00905	DI00905	0	0	0	0	0	2	3	OFF	ON
9	6	DI00906	DI00906	0	0	0	0	0	2	3	OFF	ON
9	7	DI00907	DI00907	0	0	0	0	0	2	3	OFF	ON
9	8	DI00908	DI00908	0	0	0	0	0	2	3	OFF	ON
9	9	DI00909	DI00909	0	0	0	0	0	2	3	OFF	ON
9	10	DI00910	DI00910	0	0	0	0	0	2	3	OFF	ON
9	11	DI00911	DI00911	0	0	0	0	0	2	3	OFF	ON
9	12	DI00912	DI00912	0	0	0	0	0	2	3	OFF	ON
9	13	DI00913	DI00913	0	0	0	0	0	2	3	OFF	ON

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
9	14	DI00914	DI00914	0	0	0	0	0	2	3	OFF	ON
9	15	DI00915	DI00915	0	0	0	0	0	2	3	OFF	ON
9	16	DI00916	DI00916	0	0	0	0	0	2	3	OFF	ON
9	17	DI00917	DI00917	0	0	0	0	0	2	3	OFF	ON
9	18	DI00918	DI00918	0	0	0	0	0	2	3	OFF	ON
9	19	DI00919	DI00919	0	0	0	0	0	2	3	OFF	ON
9	20	DI00920	DI00920	0	0	0	0	0	2	3	OFF	ON
9	21	DI00921	DI00921	0	0	0	0	0	2	3	OFF	ON
9	22	DI00922	DI00922	0	0	0	0	0	2	3	OFF	ON
9	23	DI00923	DI00923	0	0	0	0	0	2	3	OFF	ON
9	24	DI00924	DI00924	0	0	0	0	0	2	3	OFF	ON
9	25	DI00925	DI00925	0	0	0	0	0	2	3	OFF	ON
9	26	DI00926	DI00926	0	0	0	0	0	2	3	OFF	ON
9	27	DI00927	DI00927	0	0	0	0	0	2	3	OFF	ON
9	28	DI00928	DI00928	0	0	0	0	0	2	3	OFF	ON
9	29	DI00929	DI00929	0	0	0	0	0	2	3	OFF	ON
9	30	DI00930	DI00930	0	0	0	0	0	2	3	OFF	ON
9	31	XS RCM D7 1A	Rcm-D7 Status	0	0	0	0	0	4	7	OFF	On
9	32	DI00932	DI00932	0	0	0	0	0	2	3	OFF	ON
10	1	DI1001	DI1001 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
10	2	DI1002	DI1002 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
10	3	DI01003	DI01003	0	0	0	0	0	4	7	FALSE	TRUE
10	4	DI01004	DI01004	0	0	0	0	0	2	3	OFF	ON
10	5	DI01005	DI01005	0	0	0	0	0	2	3	OFF	ON
10	6	DI01006	DI01006	0	0	0	0	0	2	3	OFF	ON
10	7	DI01007	DI01007	0	0	0	0	0	2	3	OFF	ON
10	8	DI01008	DI01008	0	0	0	0	0	2	3	OFF	ON

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
10	9	DI01009	DI01009	0	0	0	0	0	2	3	OFF	ON
10	10	DI01010	DI01010	0	0	0	0	0	2	3	OFF	ON
10	11	DI01011	DI01011	0	0	0	0	0	2	3	OFF	ON
10	12	DI01012	DI01012	0	0	0	0	0	2	3	OFF	ON
10	13	DI01013	DI01013	0	0	0	0	0	2	3	OFF	ON
10	14	DI01014	DI01014	0	0	0	0	0	2	3	OFF	ON
10	15	DI01015	DI01015	0	0	0	0	0	2	3	OFF	ON
10	16	DI01016	DI01016	0	0	0	0	0	2	3	OFF	ON
10	17	DI01017	DI01017	0	0	0	0	0	2	3	OFF	ON
10	18	DI01018	DI01018	0	0	0	0	0	2	3	OFF	ON
10	19	DI01019	DI01019	0	0	0	0	0	2	3	OFF	ON
10	20	DI01020	DI01020	0	0	0	0	0	2	3	OFF	ON
10	21	DI01021	DI01021	0	0	0	0	0	2	3	OFF	ON
10	22	DI01022	DI01022	0	0	0	0	0	2	3	OFF	ON
10	23	DI01023	DI01023	0	0	0	0	0	2	3	OFF	ON
10	24	DI01024	DI01024	0	0	0	0	0	2	3	OFF	ON
10	25	DI01025	DI01025	0	0	0	0	0	2	3	OFF	ON
10	26	DI01026	DI01026	0	0	0	0	0	2	3	OFF	ON
10	27	DI01027	DI01027	0	0	0	0	0	2	3	OFF	ON
10	28	DI01028	DI01028	0	0	0	0	0	2	3	OFF	ON
10	29	DI01029	DI01029	0	0	0	0	0	2	3	OFF	ON
10	30	DI01030	DI01030	0	0	0	0	0	2	3	OFF	ON
10	31	XS RCM D7 2A	Rcm-D7 Status	0	0	0	0	0	4	7	OFF	ON
10	32	DI01032	DI01032	0	0	0	0	0	2	3	OFF	ON
13	1	DI1301	DI1301 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
13	2	DI01302	DI01302	0	0	0	0	0	2	3	OFF	ON
14	1	DI1401	DI1401 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
14	2	DI01402	DI01402	0	0	0	0	0	2	3	OFF	ON
17	1	ZS AZ K19 1AA	PVHemeInDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
17	2	ZS AZ K19 1AB	PVHemeInDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
17	3	ZS AZ K19 1BA	PVHemeOtDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
17	4	ZS AZ K19 1BB	PVHemeOtDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
17	5	ZS AZ K19 1CA	PVHemeByDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
17	6	ZS AZ K19 1CB	PVHemeByDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
17	7	ZS AZ K1 3B	PVCsovrBDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
17	8	DI1708	DI1708 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
17	9	DI1709	DI1709 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
17	10	ZS AZ K1 1BA	PVHtrBInDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
17	11	ZS AZ K1 1BB	PVHtrBInDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
17	12	ZS AZ K1 2BA	PVHtrBotDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
17	13	ZS AZ K1 2BB	PVHtrBotDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
17	14	DI1714	DI1714 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
17	15	DI1715	DI1715 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
17	16	YS AZ K12 1B	PVHtrB Status	0	0	0	0	0	4	7	OFF	ON
17	17	YS AZ K12 1B1	PVHtrB RemLoc	0	0	3	1	0	7	2	LOCAL	REMOTE
17	18	DI1718	DI1718 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
17	19	YS AZ K15 1BF	PVFanB VsdSts	0	0	2	1	0	3	2	FAULT	NORMAL
17	20	YS AZ K15 1B1	PVFanB RemLoc	0	0	3	1	0	7	2	LOCAL	REMOTE
17	21	ZS AZ K15 1B1	PVFanBInDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
17	22	ZS AZ K15 1B2	PVFanBotDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
17	23	ZS AZ K15 1B3	PVFanB VnsOpnLS	0	0	0	0	0	4	7	CLOSED	NOT CLS
17	24	DI1724	DI1724 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
17	25	RAH AZ K1 1	PVStk RadHi	0	0	0	0	1	2	1	NORMAL	HIGH
17	26	RAX AZ K1 1	PVStk RadFail	0	0	0	0	1	2	3	NORMAL	FAILURE

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
17	27	DI1727	DI1727 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
17	28	DI1728	DI1728 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
17	29	DI1729	DI1729 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
17	30	DI1730	DI1730 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
17	31	JAX 2 PS2 1	Lcu2 PwrSup2	0	0	2	1	0	3	2	FAULT	ON LINE
17	32	DI01732	DI01732	0	0	0	0	0	2	3	OFF	ON
18	1	XA AZ EPRBAT 1	DslBatt Status	0	0	2	0	1	2	3	NORMAL	FAULT
18	2	XA AZ EPRUPS 2	Ups2 Status	0	0	2	1	0	3	2	FAULT	NORMAL
18	3	XA AZ EPRUPS 3	Ups3 Status	0	0	2	1	0	3	2	FAULT	NORMAL
18	4	YS AZ EPR 2A	XfrSw2 NormLS	0	0	0	0	0	4	7	NOT NORM	NORMAL
18	5	YS AZ EPR 2B	XfrSw2 StdbylLS	0	0	2	0	1	2	3	NT STDBY	STANDBY
18	6	DI1806	DI1806 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
18	7	DI1807	DI1807 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
18	8	DI1808	DI1808 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
18	9	DI1809	DI1809 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
18	10	ZS 702 K2 8AA	E/IRmBlInDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
18	11	ZS 702 K2 8AB	E/IRmBlInDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
18	12	ZS 702 K2 8BA	E/IRmBOtDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
18	13	ZS 702 K2 8BB	E/IRmBOtDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
18	14	DI1814	DI1814 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
18	15	DI1815	DI1815 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
18	16	DI1816	DI1816 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
18	17	DI1817	DI1817 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
18	18	DI1818	DI1818 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
18	19	DI1819	DI1819 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
18	20	DI1820	DI1820 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
18	21	DI1821	DI1821 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
18	22	DI1822	DI1822 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
18	23	DI1823	DI1823 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
18	24	DI1824	DI1824 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
18	25	DI1825	DI1825 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
18	26	XS RCM A13 1A	Rcm-A13 Status	0	0	0	0	0	7	7	OFF	ON
18	27	XS RCM A14 1A	Rcm-A14 Status	0	0	0	0	0	7	7	OFF	ON
18	28	XS RCM D17 1A	Rcm-D17 Status	0	0	0	0	0	7	7	OFF	ON
18	29	XS RCM DR20 1A	Rcm-Dr20Status	0	0	0	0	0	7	7	OFF	ON
18	30	XS RCM DR21 1A	Rcm-Dr21Status	0	0	0	0	0	7	7	OFF	ON
18	31	JAX 2 PS1 1	Lcu2 PwrSup1	0	0	2	1	0	3	2	FAULT	ON LINE
18	32	DI01832	DI01832	0	0	0	0	0	2	3	OFF	ON
20	1	DI2001	DI2001 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
20	2	DI2002	DI2002 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
20	3	DI02003	DI02003	0	0	0	0	0	4	7	FALSE	TRUE
20	4	DI02004	DI02004	0	0	0	0	0	2	3	OFF	ON
20	5	DI02005	DI02005	0	0	0	0	0	2	3	OFF	ON
20	6	DI02006	DI02006	0	0	0	0	0	2	3	OFF	ON
20	7	DI02007	DI02007	0	0	0	0	0	2	3	OFF	ON
20	8	DI02008	DI02008	0	0	0	0	0	2	3	OFF	ON
20	9	DI02009	DI02009	0	0	0	0	0	2	3	OFF	ON
20	10	DI02010	DI02010	0	0	0	0	0	2	3	OFF	ON
20	11	DI02011	DI02011	0	0	0	0	0	2	3	OFF	ON
20	12	DI02012	DI02012	0	0	0	0	0	2	3	OFF	ON
20	13	DI02013	DI02013	0	0	0	0	0	2	3	OFF	ON
20	14	DI02014	DI02014	0	0	0	0	0	2	3	OFF	ON
20	15	DI02015	DI02015	0	0	0	0	0	2	3	OFF	ON
20	16	DI02016	DI02016	0	0	0	0	0	2	3	OFF	ON

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
20	17	DI02017	DI02017	0	0	0	0	0	2	3	OFF	ON
20	18	DI02018	DI02018	0	0	0	0	0	2	3	OFF	ON
20	19	DI02019	DI02019	0	0	0	0	0	2	3	OFF	ON
20	20	DI02020	DI02020	0	0	0	0	0	2	3	OFF	ON
20	21	DI02021	DI02021	0	0	0	0	0	2	3	OFF	ON
20	22	DI02022	DI02022	0	0	0	0	0	2	3	OFF	ON
20	23	DI02023	DI02023	0	0	0	0	0	2	3	OFF	ON
20	24	DI02024	DI02024	0	0	0	0	0	2	3	OFF	ON
20	25	DI02025	DI02025	0	0	0	0	0	2	3	OFF	ON
20	26	DI02026	DI02026	0	0	0	0	0	2	3	OFF	ON
20	27	DI02027	DI02027	0	0	0	0	0	2	3	OFF	ON
20	28	DI02028	DI02028	0	0	0	0	0	2	3	OFF	ON
20	29	DI02029	DI02029	0	0	0	0	0	2	3	OFF	ON
20	30	DI02030	DI02030	0	0	0	0	0	2	3	OFF	ON
20	31	XS RCM D18 1A	Rcm-D18 Status	0	0	0	0	0	4	7	OFF	ON
20	32	DI02032	DI02032	0	0	0	0	0	2	3	OFF	ON
21	1	DI2101	DI2101 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
21	2	DI2102	DI2102 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
21	3	DI02103	DI02103	0	0	0	0	0	4	7	FALSE	TRUE
21	4	DI02104	DI02104	0	0	0	0	0	2	3	OFF	ON
21	5	DI02105	DI02105	0	0	0	0	0	2	3	OFF	ON
21	6	DI02106	DI02106	0	0	0	0	0	2	3	OFF	ON
21	7	DI02107	DI02107	0	0	0	0	0	2	3	OFF	ON
21	8	DI02108	DI02108	0	0	0	0	0	2	3	OFF	ON
21	9	DI02109	DI02109	0	0	0	0	0	2	3	OFF	ON
21	10	DI02110	DI02110	0	0	0	0	0	2	3	OFF	ON
21	11	DI02111	DI02111	0	0	0	0	0	2	3	OFF	ON

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
21	12	DI02112	DI02112	0	0	0	0	0	2	3	OFF	ON
21	13	DI02113	DI02113	0	0	0	0	0	2	3	OFF	ON
21	14	DI02114	DI02114	0	0	0	0	0	2	3	OFF	ON
21	15	DI02115	DI02115	0	0	0	0	0	2	3	OFF	ON
21	16	DI02116	DI02116	0	0	0	0	0	2	3	OFF	ON
21	17	DI02117	DI02117	0	0	0	0	0	2	3	OFF	ON
21	18	DI02118	DI02118	0	0	0	0	0	2	3	OFF	ON
21	19	DI02119	DI02119	0	0	0	0	0	2	3	OFF	ON
21	20	DI02120	DI02120	0	0	0	0	0	2	3	OFF	ON
21	21	DI02121	DI02121	0	0	0	0	0	2	3	OFF	ON
21	22	DI02122	DI02122	0	0	0	0	0	2	3	OFF	ON
21	23	DI02123	DI02123	0	0	0	0	0	2	3	OFF	ON
21	24	DI02124	DI02124	0	0	0	0	0	2	3	OFF	ON
21	25	DI02125	DI02125	0	0	0	0	0	2	3	OFF	ON
21	26	DI02126	DI02126	0	0	0	0	0	2	3	OFF	ON
21	27	DI02127	DI02127	0	0	0	0	0	2	3	OFF	ON
21	28	DI02128	DI02128	0	0	0	0	0	2	3	OFF	ON
21	29	DI02129	DI02129	0	0	0	0	0	2	3	OFF	ON
21	30	DI02130	DI02130	0	0	0	0	0	2	3	OFF	ON
21	31	XS RCM D18 2A	Rcm-D18 Status	0	0	0	0	0	4	7	OFF	ON
21	32	DI02132	DI02132	0	0	0	0	0	2	3	OFF	ON
24	1	DI2401	DI2401 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
24	2	DI2402	DI2402 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
28	1	RAH AZ K19 1	PVHeme RadHi	0	0	2	1	0	3	2	HIGH	NORMAL
28	2	RAX AZ K19 1	PVHeme RadFail	0	0	2	1	0	3	2	FAILURE	NORMAL
28	3	DI2803	DI2803 DESCRIPTION	0	0	0	0	0	4	7	DESC LO	DESC HI
28	4	DI2804	DI2804 DESCRIPTION	0	0	0	0	0	4	7	DESC LO	DESC HI

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
28	5	LDA AY 1102 1	PV AY EncLkDt	0	0	2	1	0	3	2	LEAK	NORMAL
28	6	LDA AZ 2102 1	PV AZ EncLkDt	0	0	2	1	0	3	2	LEAK	NORMAL
28	7	LDA V0608 1	PVCrTkDrEncLkDt	0	0	2	1	0	3	2	LEAK	NORMAL
28	8	LDA AZ 503 1	SPCsdtdrEncLkDt	0	0	2	1	0	3	2	LEAK	NORMAL
28	9	LDA 702 1	VentCellSumpLkDt	0	0	2	1	0	3	2	LEAK	NORMAL
28	10	LDA 702 2A	FiltrRmA LeakDet	0	0	2	1	0	3	2	LEAK	NORMAL
28	11	LDA 702 2B	FiltrRmB LeakDet	0	0	2	1	0	3	2	LEAK	NORMAL
28	12	DI2812	DI2812 DESCRIPTION	0	0	0	0	0	4	7	DESC LO	DESC HI
28	13	DI2813	DI2813 DESCRIPTION	0	0	0	0	0	4	7	DESC LO	DESC HI
28	14	DI2814	DI2814 DESCRIPTION	0	0	0	0	0	4	7	DESC LO	DESC HI
28	15	DI2815	DI2815 DESCRIPTION	0	0	0	0	0	4	7	DESC LO	DESC HI
28	16	YS AZ CWR 1	PVChillrStatus	0	0	0	0	0	4	7	OFF	ON
28	17	XA AZ CWR 1	PVChillrFault	0	0	2	0	1	2	3	NORMAL	FAULT
28	18	YS AZ CWP 1A1	CWPump1ARemLoc	0	0	3	1	0	7	2	LOCAL	REMOTE
28	19	YS AZ CWP 1B1	CWPump1BRemLoc	0	0	3	1	0	7	2	LOCAL	REMOTE
28	20	LAL AZ CWTk 1	CWExpnTkLvlLo	0	0	2	1	0	3	2	LOW	NORMAL
28	21	DI2821	DI2821 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
28	22	DI2822	DI2822 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
28	23	DI2823	DI2823 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
28	24	DI2824	DI2824 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
28	25	LAH AZ PCSP 1	SealPot LvlHi	0	0	2	1	0	3	2	HIGH	NORMAL
28	26	LAL AZ PCSP 1	SealPot LvlLo	0	0	2	1	0	3	2	LOW	NORMAL
28	27	DI2827	DI2827 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
28	28	DI2828	DI2828 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
28	29	DI2829	DI2829 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
28	30	JAX 3 PS2 1	Lcu3 PwrSup2	0	0	2	1	0	3	2	FAULT	ON LINE
28	31	JAX 3 PS1 1	Lcu3 PwrSup1	0	0	2	1	0	3	2	FAULT	ON LINE

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
28	32	DI2832	DI2832 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
31	1	DI03101	DI03101	0	0	0	0	0	2	3	OFF	ON
31	2	DI03102	DI03102	0	0	0	0	0	2	3	OFF	ON
31	3	DI03103	DI03103	0	0	0	0	0	2	3	OFF	ON
31	4	DI03104	DI03104	0	0	0	0	0	2	3	OFF	ON
31	5	DI03105	DI03105	0	0	0	0	0	2	3	OFF	ON
31	6	DI03106	DI03106	0	0	0	0	0	2	3	OFF	ON
31	7	DI03107	DI03107	0	0	0	0	0	2	3	OFF	ON
31	8	DI03108	DI03108	0	0	0	0	0	2	3	OFF	ON
31	9	DI03109	DI03109	0	0	0	0	0	2	3	OFF	ON
31	10	DI03110	DI03110	0	0	0	0	0	2	3	OFF	ON
31	11	DI03111	DI03111	0	0	0	0	0	2	3	OFF	ON
31	12	DI03112	DI03112	0	0	0	0	0	2	3	OFF	ON
31	13	DI03113	DI03113	0	0	0	0	0	2	3	OFF	ON
31	14	DI03114	DI03114	0	0	0	0	0	2	3	OFF	ON
31	15	DI03115	DI03115	0	0	0	0	0	2	3	OFF	ON
31	16	DI03116	DI03116	0	0	0	0	0	2	3	OFF	ON
31	17	DI03117	DI03117	0	0	0	0	0	2	3	OFF	ON
31	18	DI03118	DI03118	0	0	0	0	0	2	3	OFF	ON
31	19	DI03119	DI03119	0	0	0	0	0	2	3	OFF	ON
31	20	DI03120	DI03120	0	0	0	0	0	2	3	OFF	ON
31	21	DI03121	DI03121	0	0	0	0	0	2	3	OFF	ON
31	22	DI03122	DI03122	0	0	0	0	0	2	3	OFF	ON
31	23	DI03123	DI03123	0	0	0	0	0	2	3	OFF	ON
31	24	DI03124	DI03124	0	0	0	0	0	2	3	OFF	ON
31	25	DI03125	DI03125	0	0	0	0	0	2	3	OFF	ON
31	26	DI03126	DI03126	0	0	0	0	0	2	3	OFF	ON

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
31	27	DI03127	DI03127	0	0	0	0	0	2	3	OFF	ON
31	28	DI03128	DI03128	0	0	0	0	0	2	3	OFF	ON
31	29	DI03129	DI03129	0	0	0	0	0	2	3	OFF	ON
31	30	DI03130	DI03130	0	0	0	0	0	2	3	OFF	ON
31	31	DI03131	DI03131	0	0	0	0	0	2	3	OFF	ON
31	32	DI03132	DI03132	0	0	0	0	0	2	3	OFF	ON
35	1	DI3501	DI3501 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
35	2	DI3502	DI3502 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
36	1	DI3601	DI3601 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
36	2	DI3602	DI3602 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
39	1	YS 702 K26 1	BVAcUnitOpStatus	0	0	0	0	0	4	7	OFF	ON
39	2	YS 702 K26 1A1	BVAcUnitRemLoc	0	0	3	1	0	7	2	LOCAL	REMOTE
39	3	DI3903	DI3903 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
39	4	DI3904	DI3904 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
39	5	DI3905	DI3905 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
39	6	DI3906	DI3906 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
39	7	DI3907	DI3907 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
39	8	DI3908	DI3908 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
39	9	DI3909	DI3909 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
39	10	DI3910	DI3910 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
39	11	DI3911	DI3911 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
39	12	DI3912	DI3912 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
39	13	DI3913	DI3913 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
39	14	DI3914	DI3914 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
39	15	YS 702 K35 1A1	BldFanA RemLoc	0	0	3	1	0	7	2	LOCAL	REMOTE
39	16	YS 702 K35 1B1	BldFanB RemLoc	0	0	3	1	0	7	2	LOCAL	REMOTE
39	17	DI3917	DI3917 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
39	18	DI3918	DI3918 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
39	19	DI3919	DI3919 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
39	20	ZS 702 K3 2AA	BldExhA DprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
39	21	ZS 702 K3 2AB	BldExhA DprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
39	22	ZS 702 K3 2BA	BldExhB DprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
39	23	ZS 702 K3 2BB	BldExhB DprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
39	24	DI3924	DI3924 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
39	25	RAH 702 K3 1	BldStk RadHi	0	0	1	0	1	2	1	NORMAL	HIGH
39	26	RAX 702 K3 1	BldStk RadFail	0	0	2	0	1	2	3	NORMAL	FAILURE
39	27	DI3927	DI3927 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
39	28	DI3928	DI3928 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
39	29	DI3929	DI3929 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
39	30	JAX 4 PS2 1	Lcu4 PwrSup2	0	0	2	1	0	3	2	FAULT	ON LINE
39	31	JAX 4 PS1 1	Lcu4 PwrSup1	0	0	2	1	0	3	2	FAULT	ON LINE
39	32	DI3932	DI3932 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
40	1	DI04001	DI04001	0	0	0	0	0	2	3	OFF	ON
40	2	DI04002	DI04002	0	0	0	0	0	2	3	OFF	ON
40	3	DI04003	DI04003	0	0	0	0	0	2	3	OFF	ON
40	4	DI04004	DI04004	0	0	0	0	0	2	3	OFF	ON
40	5	DI04005	DI04005	0	0	0	0	0	2	3	OFF	ON
40	6	DI04006	DI04006	0	0	0	0	0	2	3	OFF	ON
40	7	DI04007	DI04007	0	0	0	0	0	2	3	OFF	ON
40	8	DI04008	DI04008	0	0	0	0	0	2	3	OFF	ON
40	9	DI04009	DI04009	0	0	0	0	0	2	3	OFF	ON
40	10	DI04010	DI04010	0	0	0	0	0	2	3	OFF	ON
40	11	DI04011	DI04011	0	0	0	0	0	2	3	OFF	ON
40	12	DI04012	DI04012	0	0	0	0	0	2	3	OFF	ON

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
40	13	DI04013	DI04013	0	0	0	0	0	2	3	OFF	ON
40	14	DI04014	DI04014	0	0	0	0	0	2	3	OFF	ON
40	15	DI04015	DI04015	0	0	0	0	0	2	3	OFF	ON
40	16	DI04016	DI04016	0	0	0	0	0	2	3	OFF	ON
40	17	DI04017	DI04017	0	0	0	0	0	2	3	OFF	ON
40	18	DI04018	DI04018	0	0	0	0	0	2	3	OFF	ON
40	19	DI04019	DI04019	0	0	0	0	0	2	3	OFF	ON
40	20	DI04020	DI04020	0	0	0	0	0	2	3	OFF	ON
40	21	DI04021	DI04021	0	0	0	0	0	2	3	OFF	ON
40	22	DI04022	DI04022	0	0	0	0	0	2	3	OFF	ON
40	23	DI04023	DI04023	0	0	0	0	0	2	3	OFF	ON
40	24	DI04024	DI04024	0	0	0	0	0	2	3	OFF	ON
40	25	DI04025	DI04025	0	0	0	0	0	2	3	OFF	ON
40	26	DI04026	DI04026	0	0	0	0	0	2	3	OFF	ON
40	27	DI04027	DI04027	0	0	0	0	0	2	3	OFF	ON
40	28	DI04028	DI04028	0	0	0	0	0	2	3	OFF	ON
40	29	DI04029	DI04029	0	0	0	0	0	2	3	OFF	ON
40	30	DI04030	DI04030	0	0	0	0	0	2	3	OFF	ON
40	31	DI04031	DI04031	0	0	0	0	0	2	3	OFF	ON
40	32	DI04032	DI04032	0	0	0	0	0	2	3	OFF	ON
45	1	DI4501	DI4501 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
45	2	DI4502	DI4502 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
46	1	DI4601	DI4601 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
46	2	DI4602	DI4602 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
47	1	PDAH AY1K1 1	AY1InFtrDpHi	0	0	2	0	1	2	3	NORMAL	HIGH
47	2	TAL AY1 K12 1	AY1InFtrTempLo	0	0	2	1	0	3	2	LOW	NORMAL
47	3	DI4703	DI4703 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
47	4	DI4704	DI4704 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
47	5	LDA AY 1200 1	PV AY1OtEncLkDt	0	0	2	1	0	3	2	LEAK	NORMAL
47	6	LDA AY 1202 1	PV AY1RtEncLkDt	0	0	2	1	0	3	2	LEAK	NORMAL
47	7	LDA AY 401 1	AY1RecBdLeakDet	0	0	2	1	0	3	2	LEAK	NORMAL
47	8	DI4708	DI4708 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
47	9	YS AY1 K45 1A1	AY1Fan RemLoc	0	0	3	1	0	7	2	LOCAL	REMOTE
47	10	ZS AY1 K4 1A	AY1RecInDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
47	11	ZS AY1 K4 1B	AY1RecInDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
47	12	ZS AY1 K4 2A	AY1RecOtDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
47	13	ZS AY1 K4 2B	AY1RecOtDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
47	14	ZS AY1 K4 3A	AY1RecRtDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
47	15	ZS AY1 K4 3B	AY1RecRtDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
47	16	ZS AY1 K4 4A	AY1RecByDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
47	17	ZS AY1 K4 4B	AY1RecByDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
47	18	DI4718	DI4718 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
47	19	LALL AY1EWT 1	AY1EWTwrLvLlLo	0	0	2	1	0	3	2	LOW	NORMAL
47	20	PDAH AY1WF 2	AY1EWBagFtrDpHi	0	0	2	1	0	3	2	HIGH	NORMAL
47	21	YS AY1 EWSP 1	AY1EWSpyPumpSts	0	0	0	0	0	4	7	OFF	ON
47	22	YS AY1 EWT 1	AY1EWTwrFanEnabl	0	0	0	0	0	4	7	DISABLED	ENABLED
47	23	LAL AY1 EWTk 1	AY1EWGlyLvLlLo	0	0	2	1	0	3	2	LOW	NORMAL
47	24	YS AY1 EWT 1A1	AY1EWTwrFanSts	0	0	0	0	0	4	7	OFF	ON
47	25	YS AY1 EWP 1A1	AY1EWPmpA RemLoc	0	0	3	1	0	7	2	LOCAL	REMOTE
47	26	YS AY1 EWP 1B1	AY1EWPmpB RemLoc	0	0	3	1	0	7	2	LOCAL	REMOTE
47	27	DI4727	DI4727 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
47	28	DI4728	DI4728 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
47	29	DI4729	DI4729 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
47	30	DI4730	DI4730 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
47	31	DI4731	DI4731 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
47	32	DI4732	DI4732 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
48	1	PDAH AY2K1 1	AY2InFtrDpHi	0	0	2	0	1	2	3	NORMAL	HIGH
48	2	TAL AY2 K12 1	AY2InFtrTempLo	0	0	2	1	0	3	2	LOW	NORMAL
48	3	DI4803	DI4803 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
48	4	DI4804	DI4804 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
48	5	LDA AY 2200 1	PV AY2OtEncLkDt	0	0	2	1	0	3	2	LEAK	NORMAL
48	6	LDA AY 2202 1	PV AY2RtEncLkDt	0	0	2	1	0	3	2	LEAK	NORMAL
48	7	LDA AY 402 1	AY2RecBdLeakDet	0	0	2	1	0	3	2	LEAK	NORMAL
48	8	DI4808	DI4808 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
48	9	YS AY2 K45 1A1	AY2Fan RemLoc	0	0	3	1	0	7	2	LOCAL	REMOTE
48	10	ZS AY2 K4 1A	AY2RecInDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
48	11	ZS AY2 K4 1B	AY2RecInDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
48	12	ZS AY2 K4 2A	AY2RecOtDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
48	13	ZS AY2 K4 2B	AY2RecOtDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
48	14	ZS AY2 K4 3A	AY2RecRtDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
48	15	ZS AY2 K4 3B	AY2RecRtDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
48	16	ZS AY2 K4 4A	AY2RecByDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
48	17	ZS AY2 K4 4B	AY2RecByDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
48	18	DI4818	DI4818 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
48	19	LALL AY2EWT 1	AY2EWTwrLvlLo	0	0	2	1	0	3	2	LOW	HORMAL
48	20	PDAH AY2WF 2	AY2EWBagFtrDpHi	0	0	2	1	0	3	2	HIGH	NORMAL
48	21	YS AY2 EWSP 1	AY2EWSpyPumpSts	0	0	0	0	0	4	7	OFF	ON
48	22	YS AY2 EWT 1	AY2EWTwrFanEnabl	0	0	0	0	0	4	7	DISABLED	ENABLED
48	23	LAL AY2 EWTK 1	AY2EWGlyLvlLo	0	0	2	1	0	3	2	LOW	NORMAL
48	24	YS AY2 EWT 1A1	AY2EWTwrFanSts	0	0	0	0	0	4	7	OFF	ON
48	25	YS AY2 EWP 1A1	AY2EWPmpA RemLoc	0	0	3	1	0	7	2	LOCAL	REMOTE

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
48	26	YS AY2 EWP 1B1	AY2EWPmpB RemLoc	0	0	3	1	0	7	2	LOCAL	REMOTE
48	27	DI4827	DI4827 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
48	28	DI4828	DI4828 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
48	29	DI4829	DI4829 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
48	30	DI4830	DI4830 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
48	31	DI4831	DI4831 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
48	32	DI4832	DI4832 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
49	1	DI04901	DI04901	0	0	0	0	0	2	3	OFF	ON
49	2	DI04902	DI04902	0	0	0	0	0	2	3	OFF	ON
49	3	DI04903	DI04903	0	0	0	0	0	2	3	OFF	ON
49	4	DI04904	DI04904	0	0	0	0	0	2	3	OFF	ON
49	5	DI04905	DI04905	0	0	0	0	0	2	3	OFF	ON
49	6	DI04906	DI04906	0	0	0	0	0	2	3	OFF	ON
49	7	DI04907	DI04907	0	0	0	0	0	2	3	OFF	ON
49	8	DI04908	DI04908	0	0	0	0	0	2	3	OFF	ON
49	9	DI04909	DI04909	0	0	0	0	0	2	3	OFF	ON
49	10	DI04910	DI04910	0	0	0	0	0	2	3	OFF	ON
49	11	DI04911	DI04911	0	0	0	0	0	2	3	OFF	ON
49	12	DI04912	DI04912	0	0	0	0	0	2	3	OFF	ON
49	13	DI04913	DI04913	0	0	0	0	0	2	3	OFF	ON
49	14	DI04914	DI04914	0	0	0	0	0	2	3	OFF	ON
49	15	DI04915	DI04915	0	0	0	0	0	2	3	OFF	ON
49	16	DI04916	DI04916	0	0	0	0	0	2	3	OFF	ON
49	17	DI04917	DI04917	0	0	0	0	0	2	3	OFF	ON
49	18	DI04918	DI04918	0	0	0	0	0	2	3	OFF	ON
49	19	DI04919	DI04919	0	0	0	0	0	2	3	OFF	ON
49	20	DI04920	DI04920	0	0	0	0	0	2	3	OFF	ON

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
49	21	DI04921	DI04921	0	0	0	0	0	2	3	OFF	ON
49	22	DI04922	DI04922	0	0	0	0	0	2	3	OFF	ON
49	23	DI04923	DI04923	0	0	0	0	0	2	3	OFF	ON
49	24	DI04924	DI04924	0	0	0	0	0	2	3	OFF	ON
49	25	DI04925	DI04925	0	0	0	0	0	2	3	OFF	ON
49	26	DI04926	DI04926	0	0	0	0	0	2	3	OFF	ON
49	27	DI04927	DI04927	0	0	0	0	0	2	3	OFF	ON
49	28	DI04928	DI04928	0	0	0	0	0	2	3	OFF	ON
49	29	DI04929	DI04929	0	0	0	0	0	2	3	OFF	ON
49	30	DI04930	DI04930	0	0	0	0	0	2	3	OFF	ON
49	31	DI04931	DI04931	0	0	0	0	0	2	3	OFF	ON
49	32	DI04932	DI04932	0	0	0	0	0	2	3	OFF	ON
50	1	DI5001	DI5001 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
50	2	DI5002	DI5002 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
51	1	DI5101	DI5101 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
51	2	DI5102	DI5102 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
52	1	PDAH AZ1K1 1	AZ1InFtrDpHi	0	0	2	0	1	2	3	NORMAL	HIGH
52	2	TAL AZ1 K12 1	AZ1InFtrTempLo	0	0	2	1	0	3	2	LOW	NORMAL
52	3	DI5203	DI5203 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
52	4	DI5204	DI5204 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
52	5	LDA AZ 1200 1	PV AZ1OtEncLkDt	0	0	2	1	0	3	2	LEAK	NORMAL
52	6	LDA AZ 1202 1	PV AZ1RtEncLkDt	0	0	2	1	0	3	2	LEAK	NORMAL
52	7	LDA AZ 401 1	AZ1RecBdLeakDet	0	0	2	1	0	3	2	LEAK	NORMAL
52	8	DI5208	DI5208 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
52	9	YS AZ1 K45 1A1	AZ1Fan RemLoc	0	0	3	1	0	7	2	LOCAL	REMOTE
52	10	ZS AZ1 K4 1A	AZ1RecInDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
52	11	ZS AZ1 K4 1B	AZ1RecInDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
52	12	ZS AZ1 K4 2A	AZ1RecOtDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
52	13	ZS AZ1 K4 2B	AZ1RecOtDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
52	14	ZS AZ1 K4 3A	AZ1RecRtDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
52	15	ZS AZ1 K4 3B	AZ1RecRtDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
52	16	ZS AZ1 K4 4A	AZ1RecByDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
52	17	ZS AZ1 K4 4B	AZ1RecByDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
52	18	DI5218	DI5218 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
52	19	LALL AZ1EWT 1	AZ1EWTwrLvlLo	0	0	2	1	0	3	2	LOW	NORMAL
52	20	PDAH AZ1WF 2	AZ1EWBagFtrDpHi	0	0	2	1	0	3	2	HIGH	NORMAL
52	21	YS AZ1 EWSP 1	AZ1EWSPyPumpSts	0	0	0	0	0	4	7	OFF	ON
52	22	YS AZ1 EWT 1	AZ1EWTwrFanEnabl	0	0	0	0	0	4	7	DISABLED	ENABLED
52	23	LAL AZ1 EWTK 1	AZ1EWGlyLvlLo	0	0	2	1	0	3	2	LOW	NORMAL
52	24	YS AZ1 EWT 1A1	AZ1EWTwrFanSts	0	0	0	0	0	4	7	OFF	ON
52	25	YS AZ1 EWP 1A1	AZ1EWPmpA RemLoc	0	0	3	1	0	7	2	LOCAL	REMOTE
52	26	YS AZ1 EWP 1B1	AZ1EWPmpB RemLoc	0	0	3	1	0	7	2	LOCAL	REMOTE
52	27	DI5227	DI5227 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
52	28	DI5228	DI5228 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
52	29	DI5229	DI5229 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
52	30	DI5230	DI5230 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
52	31	DI5231	DI5231 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
52	32	DI5232	DI5232 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
53	1	PDAH AZ2K1 1	AZ2InFtrDpHi	0	0	2	0	1	2	3	NORMAL	HIGH
53	2	TAL AZ2 K12 1	AZ2InFtrTempLo	0	0	2	1	0	3	2	LOW	NORMAL
53	3	DI5303	DI5303 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
53	4	DI5304	DI5304 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
53	5	LDA AZ 2200 1	PV AZ2OtEncLkDt	0	0	2	1	0	3	2	LEAK	NORMAL
53	6	LDA AZ 2202 1	PV AZ2RtEncLkDt	0	0	2	1	0	3	2	LEAK	NORMAL

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
53	7	LDA AZ 402 1	AZ2RecBdLeakDet	0	0	2	1	0	3	2	LEAK	NORMAL
53	8	DI5308	DI5308 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
53	9	YS AZ2 K45 1A1	AZ2Fan RemLoc	0	0	3	1	0	7	2	LOCAL	REMOTE
53	10	ZS AZ2 K4 1A	AZ2RecInDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
53	11	ZS AZ2 K4 1B	AZ2RecInDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
53	12	ZS AZ2 K4 2A	AZ2RecOtDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
53	13	ZS AZ2 K4 2B	AZ2RecOtDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
53	14	ZS AZ2 K4 3A	AZ2RecRtDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
53	15	ZS AZ2 K4 3B	AZ2RecRtDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
53	16	ZS AZ2 K4 4A	AZ2RecByDprOpnLS	0	0	0	0	0	4	7	NOT OPEN	OPEN
53	17	ZS AZ2 K4 4B	AZ2RecByDprClsLS	0	0	0	0	0	4	7	NOT CLS	CLOSED
53	18	DI5318	DI5318 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
53	19	LALL AZ2EWT 1	AZ2EWTwrLvLlLo	0	0	2	1	0	3	2	LOW	NORMAL
53	20	PDAH AZ2WF 2	AZ2EWBagFtrDpHi	0	0	2	1	0	3	2	HIGH	NORMAL
53	21	YS AZ2 EWSP 1	AZ2EWSpyPumpSts	0	0	0	0	0	4	7	OFF	ON
53	22	YS AZ2 EWT 1	AZ2EWTwrFanEnabl	0	0	0	0	0	4	7	DISABLED	ENABLED
53	23	LAL AZ2 EWTk 1	AZ2EWTwrLvLlLo	0	0	2	1	0	3	2	LOW	NORMAL
53	24	YS AZ2 EWT 1A1	AZ2EWTwrFanSts	0	0	0	0	0	4	7	OFF	ON
53	25	YS AZ2 EWP 1A1	AZ2EWPmpA RemLoc	0	0	3	1	0	7	2	LOCAL	REMOTE
53	26	YS AZ2 EWP 1B1	AZ2EWPmpB RemLoc	0	0	3	1	0	7	2	LOCAL	REMOTE
53	27	DI5327	DI5327 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
53	28	DI5328	DI5328 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
53	29	DI5329	DI5329 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
53	30	DI5330	DI5330 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
53	31	DI5331	DI5331 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
53	32	DI5332	DI5332 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
54	1	DI05401	DI05401	0	0	0	0	0	2	3	OFF	ON

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
54	2	DI05402	DI05402	0	0	0	0	0	2	3	OFF	ON
54	3	DI05403	DI05403	0	0	0	0	0	2	3	OFF	ON
54	4	DI05404	DI05404	0	0	0	0	0	2	3	OFF	ON
54	5	DI05405	DI05405	0	0	0	0	0	2	3	OFF	ON
54	6	DI05406	DI05406	0	0	0	0	0	2	3	OFF	ON
54	7	DI05407	DI05407	0	0	0	0	0	2	3	OFF	ON
54	8	DI05408	DI05408	0	0	0	0	0	2	3	OFF	ON
54	9	DI05409	DI05409	0	0	0	0	0	2	3	OFF	ON
54	10	DI05410	DI05410	0	0	0	0	0	2	3	OFF	ON
54	11	DI05411	DI05411	0	0	0	0	0	2	3	OFF	ON
54	12	DI05412	DI05412	0	0	0	0	0	2	3	OFF	ON
54	13	DI05413	DI05413	0	0	0	0	0	2	3	OFF	ON
54	14	DI05414	DI05414	0	0	0	0	0	2	3	OFF	ON
54	15	DI05415	DI05415	0	0	0	0	0	2	3	OFF	ON
54	16	DI05416	DI05416	0	0	0	0	0	2	3	OFF	ON
54	17	DI05417	DI05417	0	0	0	0	0	2	3	OFF	ON
54	18	DI05418	DI05418	0	0	0	0	0	2	3	OFF	ON
54	19	DI05419	DI05419	0	0	0	0	0	2	3	OFF	ON
54	20	DI05420	DI05420	0	0	0	0	0	2	3	OFF	ON
54	21	DI05421	DI05421	0	0	0	0	0	2	3	OFF	ON
54	22	DI05422	DI05422	0	0	0	0	0	2	3	OFF	ON
54	23	DI05423	DI05423	0	0	0	0	0	2	3	OFF	ON
54	24	DI05424	DI05424	0	0	0	0	0	2	3	OFF	ON
54	25	DI05425	DI05425	0	0	0	0	0	2	3	OFF	ON
54	26	DI05426	DI05426	0	0	0	0	0	2	3	OFF	ON
54	27	DI05427	DI05427	0	0	0	0	0	2	3	OFF	ON
54	28	DI05428	DI05428	0	0	0	0	0	2	3	OFF	ON

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
54	29	DI05429	DI05429	0	0	0	0	0	2	3	OFF	ON
54	30	DI05430	DI05430	0	0	0	0	0	2	3	OFF	ON
54	31	DI05431	DI05431	0	0	0	0	0	2	3	OFF	ON
54	32	DI05432	DI05432	0	0	0	0	0	2	3	OFF	ON

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ATTACHMENT B
MICON AUTOMATION SYTEM
DISCRETE OUTPUTS

Table Field Descriptors

RCM		An integer value identifying the Micon Remote Controller Module
Pnt		An integer value identifying the Point number of the Controller
Tag Name		A character string identifying the variable name
Description		A character string describing the variable
Hist	scan	Data historian scan rate -- a floating point number
	def	Data historian definition - an integer value
Alarm	p	Alarm priority - integer value ¹
	lo	Alarm when this tag is a 0 (false state) - a boolean value
	hi	Alarm when this tag is a 1 (true state) - a boolean value
Color	lo	Tag state 0 color when not in alarm
	hi	Tag state 1 color when not in alarm
Description	low	Tag state 0 descriptor -- character string
	hi	Tag state 1 descriptor -- character string

¹ 0=normal "Dim grey", 1=urgent "Red", 2=caution "Yellow", 3=information "White".

² 0=Black, 1=Red, 2=Green, 3=Yellow, 4=Blue, 5=Magenta, 6=Cyan, 7=White, 8=Dim Grey, 9=Wheat, 10=Pink, 11=Lt. Green, 12=Lt. Blue, 13=Brown, 14=Aqua, 15=Orchid.

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
2	1	DO00201	DO00201	0	0	0	0	0	4	7	FALSE	TRUE
2	2	YS RCM A2 1	Rcm-A2 Status	0	0	0	0	0	4	7	FALSE	TRUE
3	1	DO00301	DO00301	0	0	0	0	0	4	7	FALSE	TRUE
3	2	YS RCM A3 1	Rcm-A3 Status	0	0	0	0	0	4	7	FALSE	TRUE
6	1	DO00601	DO00601	0	0	0	0	0	4	7	FALSE	TRUE
6	2	DO00602	DO00602	0	0	0	0	0	7	4	FALSE	TRUE
6	3	DO00603	DO00603	0	0	0	0	0	4	7	FALSE	TRUE
6	4	DO00604	DO00604	0	0	0	0	0	2	3	OFF	ON
6	5	DO00605	DO00605	0	0	0	0	0	2	3	OFF	ON
6	6	DO00606	DO00606	0	0	0	0	0	2	3	OFF	ON
6	7	DO00607	DO00607	0	0	0	0	0	2	3	OFF	ON
6	8	DO00608	DO00608	0	0	0	0	0	2	3	OFF	ON
6	9	DO00609	DO00609	0	0	0	0	0	2	3	OFF	ON
6	10	DO00610	DO00610	0	0	0	0	0	2	3	OFF	ON
6	11	DO00611	DO00611	0	0	0	0	0	2	3	OFF	ON
6	12	DO00612	DO00612	0	0	0	0	0	2	3	OFF	ON
6	13	DO00613	DO00613	0	0	0	0	0	2	3	OFF	ON
6	14	DO00614	DO00614	0	0	0	0	0	2	3	OFF	ON
6	15	DO00615	DO00615	0	0	0	0	0	2	3	OFF	ON
6	16	DO00616	DO00616	0	0	0	0	0	2	3	OFF	ON
6	17	DO00617	DO00617	0	0	0	0	0	2	3	OFF	ON
6	18	DO00618	DO00618	0	0	0	0	0	2	3	OFF	ON
6	19	DO00619	DO00619	0	0	0	0	0	2	3	OFF	ON
6	20	DO00620	DO00620	0	0	0	0	0	2	3	OFF	ON
6	21	DO00621	DO00621	0	0	0	0	0	2	3	OFF	ON
6	22	DO00622	DO00622	0	0	0	0	0	2	3	OFF	ON
6	23	DO00623	DO00623	0	0	0	0	0	2	3	OFF	ON

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
6	24	DO00624	DO00624	0	0	0	0	0	2	3	OFF	ON
6	25	DO00625	DO00625	0	0	0	0	0	2	3	OFF	ON
6	26	DO00626	DO00626	0	0	0	0	0	2	3	OFF	ON
6	27	DO00627	DO00627	0	0	0	0	0	2	3	OFF	ON
6	28	DO00628	DO00628	0	0	0	0	0	2	3	OFF	ON
6	29	YS AZ K1WD 1A1	PvDmpr2AWatchDog	0	0	0	0	0	4	7	FALSE	TRUE
6	30	YS AZ K1WD 1A2	PvDmpr2AWatchDog	0	0	0	0	0	7	4	FALSE	TRUE
6	31	DO00631	DO00631	0	0	0	0	0	2	3	OFF	ON
6	32	YS RCM D6 1	Rcm-D6 Status	0	0	0	0	0	2	3	FALSE	TRUE
7	1	DO00701	DO00701	0	0	0	0	0	4	7	FALSE	TRUE
7	2	DO00702	DO00702	0	0	0	0	0	2	3	OFF	ON
7	3	DO00703	DO00703	0	0	0	0	0	2	3	OFF	ON
7	4	DO00704	DO00704	0	0	0	0	0	2	3	OFF	ON
7	5	DO00705	DO00705	0	0	0	0	0	2	3	OFF	ON
7	6	DO00706	DO00706	0	0	0	0	0	2	3	OFF	ON
7	7	DO00707	DO00707	0	0	0	0	0	2	3	OFF	ON
7	8	DO00708	DO00708	0	0	0	0	0	2	3	OFF	ON
7	9	DO00709	DO00709	0	0	0	0	0	2	3	OFF	ON
7	10	DO00710	DO00710	0	0	0	0	0	2	3	OFF	ON
7	11	DO00711	DO00711	0	0	0	0	0	2	3	OFF	ON
7	12	DO00712	DO00712	0	0	0	0	0	2	3	OFF	ON
7	13	DO00713	DO00713	0	0	0	0	0	2	3	OFF	ON
7	14	DO00714	DO00714	0	0	0	0	0	2	3	OFF	ON
7	15	DO00715	DO00715	0	0	0	0	0	2	3	OFF	ON
7	16	DO00716	DO00716	0	0	0	0	0	2	3	OFF	ON
7	17	DO00717	DO00717	0	0	0	0	0	2	3	OFF	ON
7	18	DO00718	DO00718	0	0	0	0	0	2	3	OFF	ON

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
7	19	DO00719	DO00719	0	0	0	0	0	2	3	OFF	ON
7	20	DO00720	DO00720	0	0	0	0	0	2	3	OFF	ON
7	21	DO00721	DO00721	0	0	0	0	0	2	3	OFF	ON
7	22	DO00722	DO00722	0	0	0	0	0	2	3	OFF	ON
7	23	DO00723	DO00723	0	0	0	0	0	2	3	OFF	ON
7	24	DO00724	DO00724	0	0	0	0	0	2	3	OFF	ON
7	25	DO00725	DO00725	0	0	0	0	0	2	3	OFF	ON
7	26	DO00726	DO00726	0	0	0	0	0	2	3	OFF	ON
7	27	DO00727	DO00727	0	0	0	0	0	2	3	OFF	ON
7	28	DO00728	DO00728	0	0	0	0	0	2	3	OFF	ON
7	29	DO00729	DO00729	0	0	0	0	0	2	3	OFF	ON
7	30	DO00730	DO00730	0	0	0	0	0	2	3	OFF	ON
7	31	DO00731	DO00731	0	0	0	0	0	2	3	OFF	ON
7	32	YS RCM D7 1	Rcm-D7 Status	0	0	0	0	0	2	3	FALSE	TRUE
9	1	MK AZ K1 1AA	PvDmpr1A Open	0	0	0	0	0	4	7	FALSE	TRUE
9	2	MK AZ K1 1AB	PvDmpr1A Clse	0	0	0	0	0	4	7	FALSE	TRUE
9	3	MK AZ K1 2AA	PvDmpr2A Open	0	0	0	0	0	4	7	FALSE	TRUE
9	4	MK AZ K1 2AB	PvDmpr2A Clse	0	0	0	0	0	4	7	FALSE	TRUE
9	5	DO0905	DO0905 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
9	6	DO0906	DO0906 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
9	7	DO0907	DO0907 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
9	8	DO0908	DO0908 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
9	9	DO0909	DO0909 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
9	10	AZ K12 1AA	PvHtr1A On	0	0	0	0	0	4	7	FALSE	TRUE
9	11	AZ K12 1AB	PvRstrtB Off	0	0	0	0	0	4	7	FALSE	TRUE
9	12	DO0912	DO0912 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
9	13	DO0913	DO0913 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
9	14	DO0914	DO0914 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
9	15	DO0915	DO0915 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
9	16	DO0916	DO0916 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
9	17	DO0917	DO0917 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
9	18	DO0918	DO0918 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
9	19	DO0919	DO0919 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
9	20	DO0920	DO0920 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
9	21	DO0921	DO0921 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
9	22	DO0922	DO0922 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
9	23	DO0923	DO0923 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
9	24	DO0924	DO0924 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
9	25	DO0925	DO0925 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
9	26	DO0926	DO0926 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
9	27	DO0927	DO0927 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
9	28	DO0928	DO0928 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
9	29	DO00929	DO00929	0	0	0	0	0	2	3	OFF	ON
9	30	DO00930	DO00930	0	0	0	0	0	2	3	OFF	ON
9	31	DO00931	DO00931	0	0	0	0	0	2	3	OFF	ON
9	32	YS RCM DR9 1	Rcm-Dr9 Status	0	0	0	0	0	4	7	FALSE	TRUE
10	1	YS AZ K1WD 2A1	PvDmpr2AWatchDog	0	0	0	0	0	4	7	FALSE	TRUE
10	2	YS AZ K1WD 2A2	PvDmpr2AWatchDog	0	0	0	0	0	7	4	FALSE	TRUE
10	3	DO1003	DO1003 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
10	4	DO1004	DO1004 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
10	5	DO1005	DO1005 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
10	6	DO1006	DO1006 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
10	7	DO1007	DO1007 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
10	8	DO1008	DO1008 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
10	9	DO1009	DO1009 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
10	10	AZ K15 1AA	PvFan1A Start	0	0	0	0	0	4	7	FALSE	TRUE
10	11	AZ K15 1AB	PvRstrtB Stop	0	0	0	0	0	4	7	FALSE	TRUE
10	12	AZ K15 1AC	PvFanA VsdReset	0	0	0	0	0	4	7	NORMAL	RESET
10	13	DO1013	DO1013 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
10	14	DO1014	DO1014 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
10	15	DO1015	DO1015 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
10	16	DO1016	DO1016 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
10	17	DO1017	DO1017 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
10	18	DO1018	DO1018 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
10	19	DO1019	DO1019 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
10	20	MK 702 K2 6AA	RmDmpr6A Open	0	0	0	0	0	4	7	FALSE	TRUE
10	21	MK 702 K2 6AB	RmDmpr6A Close	0	0	0	0	0	4	7	FALSE	TRUE
10	22	MK 702 K2 6BA	RmDmpr6B Open	0	0	0	0	0	4	7	FALSE	TRUE
10	23	MK 702 K2 6BB	RmDmpr6B Close	0	0	0	0	0	4	7	FALSE	TRUE
10	24	MK 702 K2 7AA	RmDmpr7A Open	0	0	0	0	0	4	7	FALSE	TRUE
10	25	MK 702 K2 7AB	RmDmpr7A Close	0	0	0	0	0	4	7	FALSE	TRUE
10	26	MK 702 K2 7BA	RmDmpr7B Open	0	0	0	0	0	4	7	FALSE	TRUE
10	27	MK 702 K2 7BB	RmDmpr7B Close	0	0	0	0	0	4	7	FALSE	TRUE
10	28	DO1028	DO1028 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
10	29	DO01029	DO01029	0	0	0	0	0	2	3	OFF	ON
10	30	DO01030	DO01030	0	0	0	0	0	2	3	OFF	ON
10	31	DO01031	DO01031	0	0	0	0	0	2	3	OFF	ON
10	32	YS RCM DR10 1	Rcm-Dr10 Status	0	0	0	0	0	4	7	FALSE	TRUE
13	1	DO001301	DO001301	0	0	0	0	0	4	7	FALSE	TRUE
13	2	YS RCM A13 1	Rcm-A13 Status	0	0	0	0	0	4	7	FALSE	TRUE
14	1	DO001401	DO001401	0	0	0	0	0	4	7	FALSE	TRUE

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
14	2	YS RCM A14 1	Rcm-A14 Status	0	0	0	0	0	4	7	FALSE	TRUE
17	1	DO01701	DO01701	0	0	0	0	0	4	7	FALSE	TRUE
17	2	DO01702	DO01702	0	0	0	0	0	7	4	FALSE	TRUE
17	3	DO001703	DO001703	0	0	0	0	0	4	7	FALSE	TRUE
17	4	DO01704	DO01704	0	0	0	0	0	2	3	OFF	ON
17	5	DO01705	DO01705	0	0	0	0	0	2	3	OFF	ON
17	6	DO01706	DO01706	0	0	0	0	0	2	3	OFF	ON
17	7	DO01707	DO01707	0	0	0	0	0	2	3	OFF	ON
17	8	DO01708	DO01708	0	0	0	0	0	2	3	OFF	ON
17	9	DO01709	DO01709	0	0	0	0	0	2	3	OFF	ON
17	10	DO01710	DO01710	0	0	0	0	0	2	3	OFF	ON
17	11	DO01711	DO01711	0	0	0	0	0	2	3	OFF	ON
17	12	DO01712	DO01712	0	0	0	0	0	2	3	OFF	ON
17	13	DO01713	DO01713	0	0	0	0	0	2	3	OFF	ON
17	14	DO01714	DO01714	0	0	0	0	0	2	3	OFF	ON
17	15	DO01715	DO01715	0	0	0	0	0	2	3	OFF	ON
17	16	DO01716	DO01716	0	0	0	0	0	2	3	OFF	ON
17	17	DO01717	DO01717	0	0	0	0	0	2	3	OFF	ON
17	18	DO01718	DO01718	0	0	0	0	0	2	3	OFF	ON
17	19	DO01719	DO01719	0	0	0	0	0	2	3	OFF	ON
17	20	DO01720	DO01720	0	0	0	0	0	2	3	OFF	ON
17	21	DO01721	DO01721	0	0	0	0	0	2	3	OFF	ON
17	22	DO01722	DO01722	0	0	0	0	0	2	3	OFF	ON
17	23	DO01723	DO01723	0	0	0	0	0	2	3	OFF	ON
17	24	DO01724	DO01724	0	0	0	0	0	2	3	OFF	ON
17	25	DO01725	DO01725	0	0	0	0	0	2	3	OFF	ON
17	26	DO01726	DO01726	0	0	0	0	0	2	3	OFF	ON

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
17	27	DO01727	DO01727	0	0	0	0	0	2	3	OFF	ON
17	28	DO01728	DO01728	0	0	0	0	0	2	3	OFF	ON
17	29	YS AZ K1WD 1B1	PvDmpr2BWatchDog	0	0	0	0	0	4	7	FALSE	TRUE
17	30	YS AZ K1WD 1B2	PvDmpr2BWatchDog	0	0	0	0	0	7	4	FALSE	TRUE
17	31	DO01731	DO01731	0	0	0	0	0	2	3	OFF	ON
17	32	YS RCM D17 1	Rcm-D17 Status	0	0	0	0	0	4	7	FALSE	TRUE
18	1	DO01801	DO01801	0	0	0	0	0	2	3	OFF	ON
18	2	DO01802	DO01802	0	0	0	0	0	2	3	OFF	ON
18	3	DO01803	DO01803	0	0	0	0	0	2	3	OFF	ON
18	4	DO01804	DO01804	0	0	0	0	0	2	3	OFF	ON
18	5	DO01805	DO01805	0	0	0	0	0	2	3	OFF	ON
18	6	DO01806	DO01806	0	0	0	0	0	2	3	OFF	ON
18	7	DO01807	DO01807	0	0	0	0	0	2	3	OFF	ON
18	8	DO01808	DO01808	0	0	0	0	0	2	3	OFF	ON
18	9	DO01809	DO01809	0	0	0	0	0	2	3	OFF	ON
18	10	DO01810	DO01810	0	0	0	0	0	2	3	OFF	ON
18	11	DO01811	DO01811	0	0	0	0	0	2	3	OFF	ON
18	12	DO01812	DO01812	0	0	0	0	0	2	3	OFF	ON
18	13	DO01813	DO01813	0	0	0	0	0	2	3	OFF	ON
18	14	DO01814	DO01814	0	0	0	0	0	2	3	OFF	ON
18	15	DO01815	DO01815	0	0	0	0	0	2	3	OFF	ON
18	16	DO01816	DO01816	0	0	0	0	0	2	3	OFF	ON
18	17	DO01817	DO01817	0	0	0	0	0	2	3	OFF	ON
18	18	DO01818	DO01818	0	0	0	0	0	2	3	OFF	ON
18	19	DO01819	DO01819	0	0	0	0	0	2	3	OFF	ON
18	20	DO01820	DO01820	0	0	0	0	0	2	3	OFF	ON
18	21	DO01821	DO01821	0	0	0	0	0	2	3	OFF	ON

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
18	22	DO01822	DO01822	0	0	0	0	0	2	3	OFF	ON
18	23	DO01823	DO01823	0	0	0	0	0	2	3	OFF	ON
18	24	DO01824	DO01824	0	0	0	0	0	2	3	OFF	ON
18	25	DO01825	DO01825	0	0	0	0	0	2	3	OFF	ON
18	26	DO01826	DO01826	0	0	0	0	0	2	3	OFF	ON
18	27	DO01827	DO01827	0	0	0	0	0	2	3	OFF	ON
18	28	DO01828	DO01828	0	0	0	0	0	2	3	OFF	ON
18	29	DO01829	DO01829	0	0	0	0	0	2	3	OFF	ON
18	30	DO01830	DO01830	0	0	0	0	0	2	3	OFF	ON
18	31	DO01831	DO01831	0	0	0	0	0	2	3	OFF	ON
18	32	YS RCM D18 1	Rcm-D18 Status	0	0	0	0	0	4	7	FALSE	TRUE
20	1	MK AZ K1 1BA	PvDmpr1B Status	0	0	0	0	0	4	7	FALSE	TRUE
20	2	MK AZ K1 1BB	PvDmpr1B Status	0	0	0	0	0	4	7	FALSE	TRUE
20	3	MK AZ K1 2BA	PvDmpr2B Status	0	0	0	0	0	4	7	FALSE	TRUE
20	4	MK AZ K1 2BB	PvDmpr2B Status	0	0	0	0	0	4	7	FALSE	TRUE
20	5	DO2005	DO2005 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
20	6	DO2006	DO2006 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
20	7	DO2007	DO2007 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
20	8	DO2008	DO2008 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
20	9	DO2009	DO2009 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
20	10	AZ K12 1BA	PvHtr1B Status	0	0	0	0	0	4	7	FALSE	TRUE
20	11	AZ K12 1BB	PvHtr1B Status	0	0	0	0	0	4	7	FALSE	TRUE
20	12	DO2012	DO2012 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
20	13	DO2013	DO2013 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
20	14	DO2014	DO2014 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
20	15	DO2015	DO2015 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
20	16	DO2016	DO2016 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
20	17	DO2017	DO2017 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
20	18	DO2018	DO2018 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
20	19	DO2019	DO2019 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
20	20	DO2020	DO2020 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
20	21	DO2021	DO2021 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
20	22	DO2022	DO2022 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
20	23	DO2023	DO2023 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
20	24	DO2024	DO2024 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
20	25	DO2025	DO2025 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
20	26	DO2026	DO2026 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
20	27	DO2027	DO2027 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
20	28	DO2028	DO2028 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
20	29	DO02029	DO02029	0	0	0	0	0	2	3	OFF	ON
20	30	DO02030	DO02030	0	0	0	0	0	2	3	OFF	ON
20	31	DO02031	DO02031	0	0	0	0	0	2	3	OFF	ON
20	32	YS RCM DR20 1	Rcm-Dr20 Status	0	0	0	0	0	4	7	FALSE	TRUE
21	1	YS AZ K1WD 2B1	PvDmpr2BWatchDog	0	0	0	0	0	4	7	FALSE	TRUE
21	2	YS AZ K1WD 2B2	PvDmpr2BWatchDog	0	0	0	0	0	7	4	FALSE	TRUE
21	3	DO2103	DO2103 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
21	4	DO2104	DO2104 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
21	5	DO2105	DO2105 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
21	6	DO2106	DO2106 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
21	7	DO2107	DO2107 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
21	8	DO2108	DO2108 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
21	9	DO2109	DO2109 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
21	10	AZ K15 1BA	PvFan1B Status	0	0	0	0	0	4	7	FALSE	TRUE
21	11	AZ K15 1BB	PvFan1B Status	0	0	0	0	0	4	7	FALSE	TRUE

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
21	12	AZ K15 1BC	PvFanB VsdReset	0	0	0	0	0	4	7	NORMAL	RESET
21	13	DO2113	DO2113 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
21	14	DO2114	DO2114 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
21	15	DO2115	DO2115 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
21	16	DO2116	DO2116 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
21	17	DO2117	DO2117 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
21	18	DO2118	DO2118 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
21	19	DO2119	DO2119 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
21	20	MK 702 K2 8AA	RmDmpr8A Open	0	0	0	0	0	4	7	FALSE	TRUE
21	21	MK 702 K2 8AB	RmDmpr8A Close	0	0	0	0	0	4	7	FALSE	TRUE
21	22	MK 702 K2 8BA	RmDmpr8B Open	0	0	0	0	0	4	7	FALSE	TRUE
21	23	MK 702 K2 8BB	RmDmpr8B Close	0	0	0	0	0	4	7	FALSE	TRUE
21	24	DO2124	DO2124 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
21	25	DO2125	DO2125 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
21	26	DO2126	DO2126 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
21	27	DO2127	DO2127 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
21	28	DO2128	DO2128 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
21	29	DO02129	DO02129	0	0	0	0	0	2	3	OFF	ON
21	30	DO02130	DO02130	0	0	0	0	0	2	3	OFF	ON
21	31	DO02131	DO02131	0	0	0	0	0	2	3	OFF	ON
21	32	YS RCM DR21 1	Rcm-Dr21 Status	0	0	0	0	0	4	7	FALSE	TRUE
24	1	DO02401	DO02401	0	0	0	0	0	2	3	OFF	ON
24	2	DO02402	DO02402	0	0	0	0	0	2	3	OFF	ON
28	1	DO02801	DO02801	0	0	0	0	0	2	3	OFF	ON
28	2	DO02802	DO02802	0	0	0	0	0	2	3	OFF	ON
28	3	DO02803	DO02803	0	0	0	0	0	2	3	OFF	ON
28	4	DO02804	DO02804	0	0	0	0	0	2	3	OFF	ON

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
28	5	DO02805	DO02805	0	0	0	0	0	2	3	OFF	ON
28	6	DO02806	DO02806	0	0	0	0	0	2	3	OFF	ON
28	7	DO02807	DO02807	0	0	0	0	0	2	3	OFF	ON
28	8	DO02808	DO02808	0	0	0	0	0	2	3	OFF	ON
28	9	DO02809	DO02809	0	0	0	0	0	2	3	OFF	ON
28	10	DO02810	DO02810	0	0	0	0	0	2	3	OFF	ON
28	11	DO02811	DO02811	0	0	0	0	0	2	3	OFF	ON
28	12	DO02812	DO02812	0	0	0	0	0	2	3	OFF	ON
28	13	DO02813	DO02813	0	0	0	0	0	2	3	OFF	ON
28	14	DO02814	DO02814	0	0	0	0	0	2	3	OFF	ON
28	15	DO02815	DO02815	0	0	0	0	0	2	3	OFF	ON
28	16	DO02816	DO02816	0	0	0	0	0	2	3	OFF	ON
28	17	DO02817	DO02817	0	0	0	0	0	2	3	OFF	ON
28	18	DO02818	DO02818	0	0	0	0	0	2	3	OFF	ON
28	19	DO02819	DO02819	0	0	0	0	0	2	3	OFF	ON
28	20	DO02820	DO02820	0	0	0	0	0	2	3	OFF	ON
28	21	DO02821	DO02821	0	0	0	0	0	2	3	OFF	ON
28	22	DO02822	DO02822	0	0	0	0	0	2	3	OFF	ON
28	23	DO02823	DO02823	0	0	0	0	0	2	3	OFF	ON
28	24	DO02824	DO02824	0	0	0	0	0	2	3	OFF	ON
28	25	DO02825	DO02825	0	0	0	0	0	2	3	OFF	ON
28	26	DO02826	DO02826	0	0	0	0	0	2	3	OFF	ON
28	27	DO02827	DO02827	0	0	0	0	0	2	3	OFF	ON
28	28	DO02828	DO02828	0	0	0	0	0	2	3	OFF	ON
28	29	DO02829	DO02829	0	0	0	0	0	2	3	OFF	ON
28	30	DO02830	DO02830	0	0	0	0	0	2	3	OFF	ON
28	31	DO02831	DO02831	0	0	0	0	0	2	3	OFF	ON

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
28	32	DO02832	DO02832	0	0	0	0	0	2	3	OFF	ON
31	1	FSL AZ CWR 1	Chiller Flow	0	0	0	0	0	4	7	LOW	NORMAL
31	2	DO3102	DO3102 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
31	3	DO3103	DO3103 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
31	4	DO3104	DO3104 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
31	5	DO3105	DO3105 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
31	6	DO3106	DO3106 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
31	7	DO3107	DO3107 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
31	8	DO3108	DO3108 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
31	9	DO3109	DO3109 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
31	10	AZ CWP 1AA	CwPump1A Start	0	0	0	0	0	4	7	FALSE	TRUE
31	11	AZ CWP 1AB	CwPump1A Stop	0	0	0	0	0	4	7	FALSE	TRUE
31	12	AZ CWP 1BA	CwPump1B Start	0	0	0	0	0	4	7	FALSE	TRUE
31	13	AZ CWP 1BB	CwPump1B Stop	0	0	0	0	0	4	7	FALSE	TRUE
31	14	AZ CWR 1A	Chiller On	0	0	0	0	0	4	7	FALSE	TRUE
31	15	AZ CWR 1B	Chiller Off	0	0	0	0	0	4	7	FALSE	TRUE
31	16	DO3116	DO3116 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
31	17	TMACS 702 1	AyFarm LineLda	0	0	0	0	0	4	7	ALARM	NORMAL
31	18	TMACS 702 2	AyFarm BldgLda	0	0	0	0	0	4	7	ALARM	NORMAL
31	19	TMACS 702 3	TkAy101 Press	0	0	0	0	0	4	7	ALARM	NORMAL
31	20	TMACS 702 4	TkAy102 Press	0	0	0	0	0	4	7	ALARM	NORMAL
31	21	TMACS 702 5	AzFarm LineLda	0	0	0	0	0	4	7	ALARM	NORMAL
31	22	TMACS 702 6	AzFarm BldgLda	0	0	0	0	0	4	7	ALARM	NORMAL
31	23	TMACS 702 7	Az151 LineLda	0	0	0	0	0	4	7	ALARM	NORMAL
31	24	TMACS 702 8	TkAz101 Press	0	0	0	0	0	4	7	ALARM	NORMAL
31	25	TMACS 702 9	TkAz102 Press	0	0	0	0	0	4	7	ALARM	NORMAL
31	26	TMACS 702 10	PvStk Rad	0	0	0	0	0	4	7	ALARM	NORMAL

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
31	27	TMACS 702 11	PvStk SmplFlow	0	0	0	0	0	4	7	ALARM	NORMAL
31	28	TMACS 702 12	BvStk Rad d	0	0	0	0	0	4	7	ALARM	NORMAL
31	29	TMACS 702 13	BvStk SmplFlow	0	0	0	0	0	4	7	ALARM	NORMAL
31	30	TMACS 702 14	AZ702 BldgLda	0	0	0	0	0	4	7	ALARM	NORMAL
31	31	TMACS 702 15	Spare	0	0	0	0	0	4	7	ALARM	NORMAL
31	32	DO3132	DO3132 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
35	1	DO03501	DO03501	0	0	0	0	0	2	3	OFF	ON
35	2	DO03502	DO03502	0	0	0	0	0	2	3	OFF	ON
36	1	DO03601	DO03601	0	0	0	0	0	2	3	OFF	ON
36	2	DO03602	DO03602	0	0	0	0	0	2	3	OFF	ON
39	1	DO03901	DO03901	0	0	0	0	0	2	3	OFF	ON
39	2	DO03902	DO03902	0	0	0	0	0	2	3	OFF	ON
39	3	DO03903	DO03903	0	0	0	0	0	2	3	OFF	ON
39	4	DO03904	DO03904	0	0	0	0	0	2	3	OFF	ON
39	5	DO03905	DO03905	0	0	0	0	0	2	3	OFF	ON
39	6	DO03906	DO03906	0	0	0	0	0	2	3	OFF	ON
39	7	DO03907	DO03907	0	0	0	0	0	2	3	OFF	ON
39	8	DO03908	DO03908	0	0	0	0	0	2	3	OFF	ON
39	9	DO03909	DO03909	0	0	0	0	0	2	3	OFF	ON
39	10	DO03910	DO03910	0	0	0	0	0	2	3	OFF	ON
39	11	DO03911	DO03911	0	0	0	0	0	2	3	OFF	ON
39	12	DO03912	DO03912	0	0	0	0	0	2	3	OFF	ON
39	13	DO03913	DO03913	0	0	0	0	0	2	3	OFF	ON
39	14	DO03914	DO03914	0	0	0	0	0	2	3	OFF	ON
39	15	DO03915	DO03915	0	0	0	0	0	2	3	OFF	ON
39	16	DO03916	DO03916	0	0	0	0	0	2	3	OFF	ON
39	17	DO03917	DO03917	0	0	0	0	0	2	3	OFF	ON

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
39	18	DO03918	DO03918	0	0	0	0	0	2	3	OFF	ON
39	19	DO03919	DO03919	0	0	0	0	0	2	3	OFF	ON
39	20	DO03920	DO03920	0	0	0	0	0	2	3	OFF	ON
39	21	DO03921	DO03921	0	0	0	0	0	2	3	OFF	ON
39	22	DO03922	DO03922	0	0	0	0	0	2	3	OFF	ON
39	23	DO03923	DO03923	0	0	0	0	0	2	3	OFF	ON
39	24	DO03924	DO03924	0	0	0	0	0	2	3	OFF	ON
39	25	DO03925	DO03925	0	0	0	0	0	2	3	OFF	ON
39	26	DO03926	DO03926	0	0	0	0	0	2	3	OFF	ON
39	27	DO03927	DO03927	0	0	0	0	0	2	3	OFF	ON
39	28	DO03928	DO03928	0	0	0	0	0	2	3	OFF	ON
39	29	DO03929	DO03929	0	0	0	0	0	2	3	OFF	ON
39	30	DO03930	DO03930	0	0	0	0	0	2	3	OFF	ON
39	31	DO03931	DO03931	0	0	0	0	0	2	3	OFF	ON
39	32	DO03932	DO03932	0	0	0	0	0	2	3	OFF	ON
40	1	702 K26 1A	BldgAc On	0	0	0	0	0	4	7	FALSE	TRUE
40	2	702 K26 1B	BldgAc Off	0	0	0	0	0	4	7	FALSE	TRUE
40	3	DO4003	DO4003 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
40	4	DO4004	DO4004 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
40	5	DO4005	DO4005 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
40	6	DO4006	DO4006 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
40	7	DO4007	DO4007 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
40	8	DO4008	DO4008 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
40	9	DO4009	DO4009 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
40	10	DO4010	DO4010 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
40	11	DO4011	DO4011 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
40	12	DO4012	DO4012 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI

RCM	Point	Tag Name	Description	Hist		Alarm			Color			Description	
				scan	def	p	lo	hi	lo	hi	low	hi	hi
40	13	DO4013	DO4013 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI	DESC HI
40	14	DO4014	DO4014 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI	DESC HI
40	15	702 K35 1AA	BvFanA Start	0	0	0	0	0	4	7	FALSE	TRUE	TRUE
40	16	702 K35 1AB	BvFanA Stop	0	0	0	0	0	4	7	FALSE	TRUE	TRUE
40	17	702 K35 1BA	BvFanB Start	0	0	0	0	0	4	7	FALSE	TRUE	TRUE
40	18	702 K35 1BB	BvFanB Stop	0	0	0	0	0	4	7	FALSE	TRUE	TRUE
40	19	DO4019	DO4019 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI	DESC HI
40	20	MK 702 K3 2AA	BvDmpr2A Open	0	0	0	0	0	4	7	FALSE	TRUE	TRUE
40	21	MK 702 K3 2AB	BvDmpr2A Close	0	0	0	0	0	4	7	FALSE	TRUE	TRUE
40	22	MK 702 K3 2BA	BvDmpr2B Open	0	0	0	0	0	4	7	FALSE	TRUE	TRUE
40	23	MK 702 K3 2BB	BvDmpr2B Close	0	0	0	0	0	4	7	FALSE	TRUE	TRUE
40	24	DO4024	DO4024 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI	DESC HI
40	25	DO4025	DO4025 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI	DESC HI
40	26	DO4026	DO4026 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI	DESC HI
40	27	DO4027	DO4027 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI	DESC HI
40	28	DO4028	DO4028 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI	DESC HI
40	29	DO4029	DO4029 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI	DESC HI
40	30	DO4030	DO4030 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI	DESC HI
40	31	DO4031	DO4031 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI	DESC HI
40	32	DO4032	DO4032 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI	DESC HI
45	1	DO04501	DO04501	0	0	0	0	0	2	3	OFF	ON	ON
45	2	DO04502	DO04502	0	0	0	0	0	2	3	OFF	ON	ON
46	1	DO04601	DO04601	0	0	0	0	0	2	3	OFF	ON	ON
46	2	DO04602	DO04602	0	0	0	0	0	2	3	OFF	ON	ON
47	1	DO04701	DO04701	0	0	0	0	0	2	3	OFF	ON	ON
47	2	DO04702	DO04702	0	0	0	0	0	2	3	OFF	ON	ON
47	3	DO04703	DO04703	0	0	0	0	0	2	3	OFF	ON	ON

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
47	4	DO04704	DO04704	0	0	0	0	0	2	3	OFF	ON
47	5	DO04705	DO04705	0	0	0	0	0	2	3	OFF	ON
47	6	DO04706	DO04706	0	0	0	0	0	2	3	OFF	ON
47	7	DO04707	DO04707	0	0	0	0	0	2	3	OFF	ON
47	8	DO04708	DO04708	0	0	0	0	0	2	3	OFF	ON
47	9	DO04709	DO04709	0	0	0	0	0	2	3	OFF	ON
47	10	DO04710	DO04710	0	0	0	0	0	2	3	OFF	ON
47	11	DO04711	DO04711	0	0	0	0	0	2	3	OFF	ON
47	12	DO04712	DO04712	0	0	0	0	0	2	3	OFF	ON
47	13	DO04713	DO04713	0	0	0	0	0	2	3	OFF	ON
47	14	DO04714	DO04714	0	0	0	0	0	2	3	OFF	ON
47	15	DO04715	DO04715	0	0	0	0	0	2	3	OFF	ON
47	16	DO04716	DO04716	0	0	0	0	0	2	3	OFF	ON
47	17	DO04717	DO04717	0	0	0	0	0	2	3	OFF	ON
47	18	DO04718	DO04718	0	0	0	0	0	2	3	OFF	ON
47	19	DO04719	DO04719	0	0	0	0	0	2	3	OFF	ON
47	20	DO04720	DO04720	0	0	0	0	0	2	3	OFF	ON
47	21	DO04721	DO04721	0	0	0	0	0	2	3	OFF	ON
47	22	DO04722	DO04722	0	0	0	0	0	2	3	OFF	ON
47	23	DO04723	DO04723	0	0	0	0	0	2	3	OFF	ON
47	24	DO04724	DO04724	0	0	0	0	0	2	3	OFF	ON
47	25	DO04725	DO04725	0	0	0	0	0	2	3	OFF	ON
47	26	DO04726	DO04726	0	0	0	0	0	2	3	OFF	ON
47	27	DO04727	DO04727	0	0	0	0	0	2	3	OFF	ON
47	28	DO04728	DO04728	0	0	0	0	0	2	3	OFF	ON
47	29	DO04729	DO04729	0	0	0	0	0	2	3	OFF	ON
47	30	DO04730	DO04730	0	0	0	0	0	2	3	OFF	ON

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
47	31	DO04731	DO04731	0	0	0	0	0	2	3	OFF	ON
47	32	DO04732	DO04732	0	0	0	0	0	2	3	OFF	ON
48	1	DO04801	DO04801	0	0	0	0	0	2	3	OFF	ON
48	2	DO04802	DO04802	0	0	0	0	0	2	3	OFF	ON
48	3	DO04803	DO04803	0	0	0	0	0	2	3	OFF	ON
48	4	DO04804	DO04804	0	0	0	0	0	2	3	OFF	ON
48	5	DO04805	DO04805	0	0	0	0	0	2	3	OFF	ON
48	6	DO04806	DO04806	0	0	0	0	0	2	3	OFF	ON
48	7	DO04807	DO04807	0	0	0	0	0	2	3	OFF	ON
48	8	DO04808	DO04808	0	0	0	0	0	2	3	OFF	ON
48	9	DO04809	DO04809	0	0	0	0	0	2	3	OFF	ON
48	10	DO04810	DO04810	0	0	0	0	0	2	3	OFF	ON
48	11	DO04811	DO04811	0	0	0	0	0	2	3	OFF	ON
48	12	DO04812	DO04812	0	0	0	0	0	2	3	OFF	ON
48	13	DO04813	DO04813	0	0	0	0	0	2	3	OFF	ON
48	14	DO04814	DO04814	0	0	0	0	0	2	3	OFF	ON
48	15	DO04815	DO04815	0	0	0	0	0	2	3	OFF	ON
48	16	DO04816	DO04816	0	0	0	0	0	2	3	OFF	ON
48	17	DO04817	DO04817	0	0	0	0	0	2	3	OFF	ON
48	18	DO04818	DO04818	0	0	0	0	0	2	3	OFF	ON
48	19	DO04819	DO04819	0	0	0	0	0	2	3	OFF	ON
48	20	DO04820	DO04820	0	0	0	0	0	2	3	OFF	ON
48	21	DO04821	DO04821	0	0	0	0	0	2	3	OFF	ON
48	22	DO04822	DO04822	0	0	0	0	0	2	3	OFF	ON
48	23	DO04823	DO04823	0	0	0	0	0	2	3	OFF	ON
48	24	DO04824	DO04824	0	0	0	0	0	2	3	OFF	ON
48	25	DO04825	DO04825	0	0	0	0	0	2	3	OFF	ON

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
48	26	DO04826	DO04826	0	0	0	0	0	2	3	OFF	ON
48	27	DO04827	DO04827	0	0	0	0	0	2	3	OFF	ON
48	28	DO04828	DO04828	0	0	0	0	0	2	3	OFF	ON
48	29	DO04829	DO04829	0	0	0	0	0	2	3	OFF	ON
48	30	DO04830	DO04830	0	0	0	0	0	2	3	OFF	ON
48	31	DO04831	DO04831	0	0	0	0	0	2	3	OFF	ON
48	32	DO04832	DO04832	0	0	0	0	0	2	3	OFF	ON
49	1	AY1 K45 1A	RrcFan Start	0	0	0	0	0	4	7	FALSE	TRUE
49	2	AY1 K45 1B	RrcFan Stop	0	0	0	0	0	4	7	FALSE	TRUE
49	3	DO4903	DO4903 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
49	4	DO4904	DO4904 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
49	5	AY1 EWP 1AA	EwPump1A Start	0	0	0	0	0	4	7	FALSE	TRUE
49	6	AY1 EWP 1AB	EwPump1A Stop	0	0	0	0	0	4	7	FALSE	TRUE
49	7	AY1 EWP 1BA	EwPump1B Start	0	0	0	0	0	4	7	FALSE	TRUE
49	8	AY1 EWP 1BB	EwPump1B Stop	0	0	0	0	0	4	7	FALSE	TRUE
49	9	AY1 EWSP 1A	EwSpPump Start	0	0	0	0	0	4	7	FALSE	TRUE
49	10	AY1 EWSP 1B	EwSpPump Stop	0	0	0	0	0	4	7	FALSE	TRUE
49	11	AY1 EWT 1A	EwTower On	0	0	0	0	0	4	7	FALSE	TRUE
49	12	AY1 EWT 1B	EwTower Off	0	0	0	0	0	4	7	FALSE	TRUE
49	13	DO4913	DO4913 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
49	14	DO4914	DO4914 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
49	15	AY2 K45 1A	RrcFan Start	0	0	0	0	0	4	7	FALSE	TRUE
49	16	AY2 K45 1B	RrcFan Stop	0	0	0	0	0	4	7	FALSE	TRUE
49	17	DO4917	DO4917 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
49	18	YS AZ K15 1	PVFanStsToCFarm	0	0	0	0	0	4	7	OFF	ON
49	19	DO4919	DO4919 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
49	20	AY2 EWP 1AA	EwPump1A Start	0	0	0	0	0	4	7	FALSE	TRUE

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
49	21	AY2 EWP 1AB	PvRstrtB Stop	0	0	0	0	0	4	7	FALSE	TRUE
49	22	AY2 EWP 1BA	EwPump1B Start	0	0	0	0	0	4	7	FALSE	TRUE
49	23	AY2 EWP 1BB	EwPump1B Stop	0	0	0	0	0	4	7	FALSE	TRUE
49	24	AY2 EWSP 1A	EwSpPump Start	0	0	0	0	0	4	7	FALSE	TRUE
49	25	AY2 EWSP 1B	EwSpPump Stop	0	0	0	0	0	4	7	FALSE	TRUE
49	26	AY2 EWT 1A	EwTower On	0	0	0	0	0	4	7	FALSE	TRUE
49	27	AY2 EWT 1B	EwTower Off	0	0	0	0	0	4	7	FALSE	TRUE
49	28	DO4928	DO4928 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
49	29	DO4929	DO4929 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
49	30	DO4930	DO4930 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
49	31	DO4931	DO4931 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
49	32	DO4932	DO4932 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
50	1	DO05001	DO05001	0	0	0	0	0	2	3	OFF	ON
50	2	DO05002	DO05002	0	0	0	0	0	2	3	OFF	ON
51	1	DO05101	DO05101	0	0	0	0	0	2	3	OFF	ON
51	2	DO05102	DO05102	0	0	0	0	0	2	3	OFF	ON
52	1	DO05201	DO05201	0	0	0	0	0	2	3	OFF	ON
52	2	DO05202	DO05202	0	0	0	0	0	2	3	OFF	ON
52	3	DO05203	DO05203	0	0	0	0	0	2	3	OFF	ON
52	4	DO05204	DO05204	0	0	0	0	0	2	3	OFF	ON
52	5	DO05205	DO05205	0	0	0	0	0	2	3	OFF	ON
52	6	DO05206	DO05206	0	0	0	0	0	2	3	OFF	ON
52	7	DO05207	DO05207	0	0	0	0	0	2	3	OFF	ON
52	8	DO05208	DO05208	0	0	0	0	0	2	3	OFF	ON
52	9	DO05209	DO05209	0	0	0	0	0	2	3	OFF	ON
52	10	DO05210	DO05210	0	0	0	0	0	2	3	OFF	ON
52	11	DO05211	DO05211	0	0	0	0	0	2	3	OFF	ON

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
52	12	DO05212	DO05212	0	0	0	0	0	2	3	OFF	ON
52	13	DO05213	DO05213	0	0	0	0	0	2	3	OFF	ON
52	14	DO05214	DO05214	0	0	0	0	0	2	3	OFF	ON
52	15	DO05215	DO05215	0	0	0	0	0	2	3	OFF	ON
52	16	DO05216	DO05216	0	0	0	0	0	2	3	OFF	ON
52	17	DO05217	DO05217	0	0	0	0	0	2	3	OFF	ON
52	18	DO05218	DO05218	0	0	0	0	0	2	3	OFF	ON
52	19	DO05219	DO05219	0	0	0	0	0	2	3	OFF	ON
52	20	DO05220	DO05220	0	0	0	0	0	2	3	OFF	ON
52	21	DO05221	DO05221	0	0	0	0	0	2	3	OFF	ON
52	22	DO05222	DO05222	0	0	0	0	0	2	3	OFF	ON
52	23	DO05223	DO05223	0	0	0	0	0	2	3	OFF	ON
52	24	DO05224	DO05224	0	0	0	0	0	2	3	OFF	ON
52	25	DO05225	DO05225	0	0	0	0	0	2	3	OFF	ON
52	26	DO05226	DO05226	0	0	0	0	0	2	3	OFF	ON
52	27	DO05227	DO05227	0	0	0	0	0	2	3	OFF	ON
52	28	DO05228	DO05228	0	0	0	0	0	2	3	OFF	ON
52	29	DO05229	DO05229	0	0	0	0	0	2	3	OFF	ON
52	30	DO05230	DO05230	0	0	0	0	0	2	3	OFF	ON
52	31	DO05231	DO05231	0	0	0	0	0	2	3	OFF	ON
52	32	DO05232	DO05232	0	0	0	0	0	2	3	OFF	ON
53	1	DO05301	DO05301	0	0	0	0	0	2	3	OFF	ON
53	2	DO05302	DO05302	0	0	0	0	0	2	3	OFF	ON
53	3	DO05303	DO05303	0	0	0	0	0	2	3	OFF	ON
53	4	DO05304	DO05304	0	0	0	0	0	2	3	OFF	ON
53	5	DO05305	DO05305	0	0	0	0	0	2	3	OFF	ON
53	6	DO05306	DO05306	0	0	0	0	0	2	3	OFF	ON

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
53	7	DO05307	DO05307	0	0	0	0	0	2	3	OFF	ON
53	8	DO05308	DO05308	0	0	0	0	0	2	3	OFF	ON
53	9	DO05309	DO05309	0	0	0	0	0	2	3	OFF	ON
53	10	DO05310	DO05310	0	0	0	0	0	2	3	OFF	ON
53	11	DO05311	DO05311	0	0	0	0	0	2	3	OFF	ON
53	12	DO05312	DO05312	0	0	0	0	0	2	3	OFF	ON
53	13	DO05313	DO05313	0	0	0	0	0	2	3	OFF	ON
53	14	DO05314	DO05314	0	0	0	0	0	2	3	OFF	ON
53	15	DO05315	DO05315	0	0	0	0	0	2	3	OFF	ON
53	16	DO05316	DO05316	0	0	0	0	0	2	3	OFF	ON
53	17	DO05317	DO05317	0	0	0	0	0	2	3	OFF	ON
53	18	DO05318	DO05318	0	0	0	0	0	2	3	OFF	ON
53	19	DO05319	DO05319	0	0	0	0	0	2	3	OFF	ON
53	20	DO05320	DO05320	0	0	0	0	0	2	3	OFF	ON
53	21	DO05321	DO05321	0	0	0	0	0	2	3	OFF	ON
53	22	DO05322	DO05322	0	0	0	0	0	2	3	OFF	ON
53	23	DO05323	DO05323	0	0	0	0	0	2	3	OFF	ON
53	24	DO05324	DO05324	0	0	0	0	0	2	3	OFF	ON
53	25	DO05325	DO05325	0	0	0	0	0	2	3	OFF	ON
53	26	DO05326	DO05326	0	0	0	0	0	2	3	OFF	ON
53	27	DO05327	DO05327	0	0	0	0	0	2	3	OFF	ON
53	28	DO05328	DO05328	0	0	0	0	0	2	3	OFF	ON
53	29	DO05329	DO05329	0	0	0	0	0	2	3	OFF	ON
53	30	DO05330	DO05330	0	0	0	0	0	2	3	OFF	ON
53	31	DO05331	DO05331	0	0	0	0	0	2	3	OFF	ON
53	32	DO05332	DO05332	0	0	0	0	0	2	3	OFF	ON
54	1	AZ1 K45 1A	RrcrFan Start	0	0	0	0	0	4	7	FALSE	TRUE

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
54	2	AZ1 K45 1B	RrcFan Stop	0	0	0	0	0	4	7	FALSE	TRUE
54	3	DO5403	DO5403 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
54	4	DO5404	DO5404 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
54	5	AZ1 EWP 1AA	EwPump1A Start	0	0	0	0	0	4	7	FALSE	TRUE
54	6	AZ1 EWP 1AB	EwPump1A Stop	0	0	0	0	0	4	7	FALSE	TRUE
54	7	AZ1 EWP 1BA	EwPump1B Start	0	0	0	0	0	4	7	FALSE	TRUE
54	8	AZ1 EWP 1BB	EwPump1B Stop	0	0	0	0	0	4	7	FALSE	TRUE
54	9	AZ1 EWSP 1A	EwSpPump Start	0	0	0	0	0	4	7	FALSE	TRUE
54	10	AZ1 EWSP 1B	EwSpPump Stop	0	0	0	0	0	4	7	FALSE	TRUE
54	11	AZ1 EWT 1A	EwTower On	0	0	0	0	0	4	7	FALSE	TRUE
54	12	AZ1 EWT 1B	EwTower Off	0	0	0	0	0	4	7	FALSE	TRUE
54	13	DO5413	DO5413 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
54	14	DO5414	DO5414 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
54	15	AZ2 K45 1A	RrcFan Start	0	0	0	0	0	4	7	FALSE	TRUE
54	16	AZ2 K45 1B	RrcFan Stop	0	0	0	0	0	4	7	FALSE	TRUE
54	17	DO5417	DO5417 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
54	18	DO5418	DO5418 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
54	19	DO5419	DO5419 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
54	20	AZ2 EWP 1AA	EwPump1A Start	0	0	0	0	0	4	7	FALSE	TRUE
54	21	AZ2 EWP 1AB	EwPump1A Stop	0	0	0	0	0	4	7	FALSE	TRUE
54	22	AZ2 EWP 1BA	EwPump1B Start	0	0	0	0	0	4	7	FALSE	TRUE
54	23	AZ2 EWP 1BB	EwPump1B Stop	0	0	0	0	0	4	7	FALSE	TRUE
54	24	AZ2 EWSP 1A	EwSpPump Start	0	0	0	0	0	4	7	FALSE	TRUE
54	25	AZ2 EWSP 1B	EwSpPump Stop	0	0	0	0	0	4	7	FALSE	TRUE
54	26	AZ2 EWT 1A	EwTower On	0	0	0	0	0	4	7	FALSE	TRUE
54	27	AZ2 EWT 1B	EwTower Off	0	0	0	0	0	4	7	FALSE	TRUE
54	28	DO5428	DO5428 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI

RCM	Point	Tag Name	Description	Hist		Alarm			Color		Description	
				scan	def	p	lo	hi	lo	hi	low	hi
54	29	DO5429	DO5429 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
54	30	DO5430	DO5430 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
54	31	DO5431	DO5431 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI
54	32	DO5432	DO5432 DESCRIPTION	0	0	0	0	0	7	7	DESC LO	DESC HI

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ATTACHMENT C
MICON AUTOMATION SYTEM
ANALOG INPUTS

Table Field Descriptors

RCM		Micon Remote Controller Module - Integer Value
Pnt		Point number of the Controller - Integer Value
Tag Name		Variable name -- Character String
Description		Description of the variable - Character String
Units		Engineering Units of the variable
Hscan		Data Historian Scan Rate -- Floating point number in seconds
Range	lo	Range low value - floating point number
	hi	Range high value - floating point number
Plot	lo	Plot scale low value - floating point number
	hi	Plot scale high value - floating point number
Hist		Historical definition - integer value
Process	alm	Process transmitter alarm - boolean value (1 if variable has alarm)
	db	Transmitter alarm deadband
Hi	setpnt	Transmitter high alarm setpoint - floating point value
	pri	Transmitter high alarm priority - integer value ¹
HiHi	setpnt	Transmitter high-high alarm setpoint - floating point value
	pri	Transmitter high-high alarm priority - integer value ¹
Max	setpnt	Transmitter Max alarm setpoint - floating point value
	pri	Transmitter Max alarm priority - integer value ¹
Low	setpnt	Transmitter Low alarm setpoint - floating point value
	pri	Transmitter Low alarm priority - integer value ¹
Lo Lo	setpnt	Transmitter Low-Low alarm setpoint - floating point value
	pri	Transmitter Low-Low alarm priority - integer value ¹
Min	setpnt	Transmitter Min alarm setpoint - floating point value
	pri	Transmitter Min alarm priority - integer value ¹

¹ 0=normal "Dim grey", 1=urgent "Red", 2=caution "Yellow", 3=information "White".

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RCM	Pnt	Tag	Desc	Units	Hscan	Range		Plot		Hist	Alarm													
											Process		Hi		HiHi		Max		Low		Lo Lo		Min	
						lo	hi	lo	hi	def	alm	db	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri
2	1	FI AZ1 K1 2	AZ1OtPV Flow	SCFM	10	0	700	0	700	1	1	3	650	2	-	0	-	0	50	2	-	0	-	0
2	2	ZI AZ1 K1 2	AZ1OtFlwDpr%Opn	PERCENT	28800	0	100	0	100	1	1	0.5	-	0	-	0	-	0	-12.5	2	-	0	-	0
2	3	AI0203	AI0203 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
2	4	AI0204	AI0204 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
2	5	AI0205	AI0205 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
2	6	FI AZ2 K1 2	AZ2OtPV Flow	SCFM	10	0	700	0	700	1	1	3	650	2	-	0	-	0	50	2	-	0	-	0
2	7	ZI AZ2 K1 2	AZ2OtFlwDpr%Opn	PERCENT	28800	0	100	0	100	1	1	0.5	-	0	-	0	-	0	-12.5	2	-	0	-	0
2	8	AI0208	AI0208 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
2	9	AI0209	AI0209 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
2	10	PDI AZ K18 1	PVCdsr Dp	IN WC	7200	0	20	0	20	1	1	0.1	11	2	-	0	-	0	-2.5	2	-	0	-	0
2	11	AI0211	AI0211 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
2	12	AI0212	AI0212 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
2	13	AI0213	AI0213 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
2	14	AI0214	AI0214 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
2	15	TI 702 K2 1	StkMonRm Temp	DEG F	28800	-20	150	0	150	1	1	0.85	90	2	110	1	-	0	-41.25	2	-	0	-	0
2	16	TI 702 K2 2	E/RmA Temp	DEG F	28800	-20	150	0	150	1	1	0.85	90	2	110	1	-	0	-41.25	2	-	0	-	0
2	17	TI 702 K2 4	FitrRmA Temp	DEG F	28800	-20	150	0	150	1	1	0.85	120	2	-	0	-	0	-41.25	2	-	0	-	0
2	18	AI0218	AI0218 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
2	19	AI0219	AI0219 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
2	20	AI0220	AI0220 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
2	21	AI0221	AI0221 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
2	22	AI0222	AI0222 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
2	23	AI0223	AI0223 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
2	24	AI0224	AI0224 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
2	25	AI0225	AI0225 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
2	26	AI0226	AI0226 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
3	1	TI AZ K12 1A	PVHtr1A InTemp	DEG F	7200	0	250	0	250	1	1	1.25	175	2	-	0	-	0	-31.25	2	-	0	-	0

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RCM	Pnt	Tag	Desc	Units	Hscan	Alarm																		
						Range		Plot		Hist	Process		Hi		HiHi		Max		Low		Lo Lo		Min	
						lo	hi	lo	hi		def	alm	db	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt
3	2	AI0302	AI0302 DESCRIPTION	DEG F	0	0	250	0	250	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
3	3	TI AZ K12 3A	PVHtriA HepaTemp	DEG F	7200	0	250	0	250	1	1	1.25	195	2	230	1	245	1	-31.25	2	-	0	-	0
3	4	AI0304	AI0304 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
3	5	AI0305	AI0305 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
3	6	AI0306	AI0306 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
3	7	AI0307	AI0307 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
3	8	AI0308	AI0308 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
3	9	AI0309	AI0309 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
3	10	PDI AZ K14 1A	PVHepa1A Dp	IN WC	7200	0	6	0	6	1	1	0.03	3	2	5	1	-	0	-0.75	2	-	0	-	0
3	11	PDI AZ K14 2A	PVHepa2A Dp	IN WC	7200	0	6	0	6	1	1	0.03	3	2	5	1	-	0	-0.75	2	-	0	-	0
3	12	PDI AZ K110 1A	PVHega1A Dp	IN WC	28800	0	5	0	5	1	1	0.03	2.5	2	3	1	-	0	-0.63	2	-	0	-	0
3	13	AI0313	AI0313 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
3	14	AI0314	AI0314 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
3	15	II AZ K15 1A	PVFan1A %Load	%LOAD	28800	0	150	0	150	1	1	0.75	100	2	-	0	-	0	-	0	-	0	-	0
3	16	SI AZ K15 1A	PVFan1A Speed	RPM	28800	0	4000	0	4000	1	1	10	-	0	-	0	-	0	-500	2	-	0	-	0
3	17	PI AZ K1 1A	PVHdr1A Press	IN WC	28800	-35	0	-35	0	1	1	0.17	-7	2	-	0	-	0	-32	2	-37	2	-	0
3	18	AI0318	AI0318 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
3	19	AI0319	AI0319 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
3	20	AI0320	AI0320 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
3	21	AI0321	AI0321 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
3	22	AI0322	AI0322 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
3	23	AI0323	AI0323 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
3	24	AI0324	AI0324 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
3	25	AI0325	AI0325 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
3	26	AI0326	AI0326 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
13	1	FI AY1 K1 2	AY1OPV Flow	SCFM	10	0	700	0	700	1	1	3	650	2	-	0	-	0	50	2	-	0	-	0
13	2	ZI AY1 K1 2	AY1OtdFlwDpr%Onn	PERCENT	28800	0	100	0	100	1	1	0.5	-	0	-	0	-	0	-12.5	2	-	0	-	0

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RCM	Pnt	Tag	Desc	Units	Hscan	Range		Plot		Hist	Alarm															
						lo	hi	lo	hi		def	Process		Hi		HiHi		Max		Low		Lo Lo		Min		
												alm	db	setpnt	pri	setpnt	pri	setpnt	pr i	setpnt	pri	setpnt	pri	setpnt	pri	
13	3	AI1303	AI1303 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
13	4	AI1304	AI1304 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
13	5	AI1305	AI1305 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
13	6	FI AY2 K1 2	AY2OPV Flow	SCFM	10	0	700	0	700	1	1	3	650	2	-	0	-	0	50	2	-	0	-	0		
13	7	ZI AY2 K1 2	AY2OFwDpr%Opn	PERCENT	28800	0	100	0	100	1	1	0.5	-	0	-	0	-	0	-12.5	2	-	0	-	0		
13	8	AI1308	AI1308 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
13	9	AI1309	AI1309 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
13	10	PDI AZ K19 1	PVHeme Dp	IN WC	7200	0	10	0	10	1	1	0.05	10	3	15	2	-	0	-1.25	2	-	0	-	0		
13	11	AI1311	AI1311 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
13	12	AI1312	AI1312 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
13	13	AI1313	AI1313 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
13	14	AI1314	AI1314 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
13	15	TI 702 K2 3	E/RmB Temp	DEG F	28800	-20	150	0	150	1	1	0.85	90	2	110	1	-	0	-41.25	2	-	0	-	0		
13	16	TI 702 K2 5	FiltrmB Temp	DEG F	28800	-20	150	0	150	1	1	0.85	120	2	-	0	-	0	-41.25	2	-	0	-	0		
13	17	AI1317	AI1317 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
13	18	AI1318	AI1318 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
13	19	AI1319	AI1319 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
13	20	AI1320	AI1320 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
13	21	AI1321	AI1321 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
13	22	AI1322	AI1322 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
13	23	AI1323	AI1323 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
13	24	AI1324	AI1324 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
13	25	AI1325	AI1325 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
13	26	AI1326	AI1326 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
14	1	TI AZ K12 1B	PVHtr1B InTemp	DEG F	7200	0	250	0	250	1	1	1.25	175	2	-	0	-	0	-31.25	2	-	0	-	0		
14	2	AI1402	AI1402 DESCRIPTION	ENG UNIT	28800	0	100	0	100	0	0	0	-	0	-	0	-	0	-31.25	2	-	0	-	0		
14	3	TI AZ K12 3B	PVHtr1B HepaTemp	DEG F	7200	0	250	0	250	1	1	1.25	195	2	230	1	245	1	-	0	-	0	-	0		

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RCM	Pnt	Tag	Desc	Units	Hscan	Alarm																		
						Range		Plot		Hist	Process		Hi		HiHi		Max		Low		Lo Lo		Min	
						lo	hi	lo	hi		def	alm	db	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt
14	4	AI1404	AI1404 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
14	5	FI AZ K1 1	PVSikRadSampFlow	SCFM	28800	0	2	0	2	1	1	0.01	-	0	-	0	-	0	0.3	2	-	0	-	0
14	6	FI AZ K1 2	PVSikRecSampFlow	SCFM	28800	0	2	0	2	1	1	0.01	-	0	-	0	-	0	0.3	2	-	0	-	0
14	7	FI AZ K1 3	PVSik Flow	SCFM	10	0	1100	0	1100	1	1	6	800	2	-	0	-	0	200	2	-75	2	-	0
14	8	RI AZ K1 1A	PVSik RadLog	DECADES	28800	0	5	0	5	0	1	0.02	-	0	-	0	-	0	-0.63	2	-	0	-	0
14	9	TI AZ K1 3	PVSik Temp	DEG F	3600	0	200	0	200	1	1	1	-	0	-	0	-	0	-25	2	-	0	-	0
14	10	PDI AZ K14 1B	PVHepa1B Dp	IN WC	7200	0	6	0	6	1	1	0.03	3	2	5	1	-	0	-0.75	2	-	0	-	0
14	11	PDI AZ K14 2B	PVHepa2B Dp	IN WC	7200	0	6	0	6	1	1	0.03	3	2	5	1	-	0	-0.75	2	-	0	-	0
14	12	PDI AZ K110 1B	PVHega1B Dp	IN WC	28800	0	5	0	5	1	1	0.03	2.5	2	3	1	-	0	-0.63	2	-	0	-	0
14	13	AI1413	AI1413 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
14	14	AI1414	AI1414 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
14	15	II AZ K15 1B	PVFan1B %Load	%LOAD	28800	0	150	0	150	1	1	0.75	100	2	-	0	-	0	-	0	-	0	-	0
14	16	SI AZ K15 1B	PVFan1B Speed	RPM	28800	0	4000	0	4000	1	1	10	-	0	-	0	-	0	-500	2	-	0	-	0
14	17	PI AZ K1 1B	PVHdr1B Press	IN WC	28800	-35	0	-35	0	1	1	0.17	-7	2	-	0	-	0	-32	2	-37	2	-	0
14	18	AI1418	AI1418 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
14	19	AI1419	AI1419 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
14	20	AI1420	AI1420 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
14	21	AI1421	AI1421 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
14	22	AI1422	AI1422 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
14	23	AI1423	AI1423 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
14	24	AI1424	AI1424 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
14	25	AI1425	AI1425 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
14	26	AI1426	AI1426 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
24	1	TI AZ K18 1A	PVCdsrInVapTemp	DEG F	7200	0	150	0	150	1	0	0.75	-	0	-	0	-	0	-	0	-	0	-	0
24	2	TI AZ K18 1B	PVCdsrOtVapTemp	DEG F	7200	0	100	0	100	1	0	0.5	-	0	-	0	-	0	38	3	35	2	-	0
24	3	AI2403	AI2403 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
24	4	AI2404	AI2404 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0

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RCM	Pnt	Tag	Desc	Units	Hscan	Range		Plot		Hist	Alarm													
											Process		Hi		HiHi		Max		Low		Lo Lo		Min	
						lo	hi	lo	hi	def	alm	db	setpnt	pri	setpnt	pri	setpnt	pr i	setpnt	pri	setpnt	pri	setpnt	pri
24	5	RI AZ K19 1A	PVHeme RadLog	DECADES	28800	-1	5	-1	5	0	0	0.02	-	0	-	0	-	0	-	0	-	0	-	0
24	6	AI2406	AI2406 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
24	7	AI2407	AI2407 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
24	8	AI2408	AI2408 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
24	9	AI2409	AI2409 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
24	10	PDI AZ RWF 1	RawWaterStrainDp	PSID	28800	0	10	0	10	1	1	0.05	9	2	-	0	-	0	-1.25	2	-	0	-	0
24	11	PI AZ RW 1	RawWaterPress	PSI	28800	0	100	0	100	1	1	0.5	-	0	-	0	-	0	20	2	-	0	-	0
24	12	FI AZ RW 1	RawWaterFlow	GPM	28800	0	50	0	50	1	0	0.25	-	0	-	0	-	0	-	0	-	0	-	0
24	13	AI2413	AI2413 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
24	14	AI2414	AI2414 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
24	15	FI AZ CWR 1	CW Cool SysFlow	GPM	28800	0	150	0	150	1	1	0.75	-	0	-	0	-	0	100	2	-	0	-	0
24	16	II AZ CWP 1A	CWPump1ACurrent	AMP	28800	0	10	0	10	1	0	0.05	-	0	-	0	-	0	-	0	-	0	-	0
24	17	II AZ CWP 1B	CWPump1BCurrent	AMP	28800	0	10	0	10	1	0	0.05	-	0	-	0	-	0	-	0	-	0	-	0
24	18	TI AZ CWR 1	CWRet Temp	F	28800	0	100	0	100	1	0	0.5	-	0	-	0	-	0	-	0	-	0	-	0
24	19	TI AZ CWS 1	CWSup Temp	F	28800	0	100	0	100	1	0	0.5	-	0	-	0	-	0	-	0	-	0	-	0
24	20	AI2420	AI2420 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
24	21	AI2421	AI2421 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
24	22	AI2422	AI2422 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
24	23	AI2423	AI2423 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
24	24	AI2424	AI2424 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
24	25	FI AZ PC 1	SealPot Flow	GPM	28800	0	5	0	5	1	0	0.03	-	0	-	0	-	0	-	0	-	0	-	0
24	26	AI2426	AI2426 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
35	1	PDI 702 K2 1	StkMonRm Dp	IN WC	10	-0.3	0.2	-0	0.2	1	0	0	-	0	-	0	-	0	-	0	-	0	-	0
35	2	PDI 702 K2 2	E/iRmA Dp	IN WC	10	-1	0	-1	0	1	0	0	-	0	-	0	-	0	-	0	-	0	-	0
35	3	PDI 702 K2 3	E/iRmB Dp	IN WC	10	-1	0	-1	0	1	0	0	-	0	-	0	-	0	-	0	-	0	-	0
35	4	AI3504	AI3504 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
35	5	AI3505	AI3505 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0

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RCM Pnt	Tag	Desc	Units	Hscan	Range		Plot	Hist	Process		Hi		HiHi		Alarm		Low		Lo Lo		Min	
					lo	hi			def	alm	db	secpnt	pri	secpnt	pri	secpnt	pr i	secpnt	pri	secpnt	pri	secpnt
35	6	AI3506	AI3506 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
35	7	AI3507	AI3507 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
35	8	AI3508	AI3508 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
35	9	AI3509	AI3509 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
35	10	PDI 702 K24 1	FrRmAOHepalDp	IN WC	7200	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
35	11	PDI 702 K24 2	FrRmAOHepalDp	IN WC	7200	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
35	12	ZI 702 K24 1	FrRmAOHepalDp	PERCENT	28800	0	100	0	100	1	0	0.5	0	0	0	0	0	0	0	0	0	0
35	13	ZI 702 K24 2	FrRmAOHepalDp	PERCENT	28800	0	100	0	100	1	0	0.5	0	0	0	0	0	0	0	0	0	0
35	14	AI3514	AI3514 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
35	15	AI3515	AI3515 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
35	16	AI3516	AI3516 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
35	17	AI3517	AI3517 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
35	18	AI3518	AI3518 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
35	19	AI3519	AI3519 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
35	20	AI3520	AI3520 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
35	21	AI3521	AI3521 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
35	22	AI3522	AI3522 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
35	23	AI3523	AI3523 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
35	24	AI3524	AI3524 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
35	25	AI3525	AI3525 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
35	26	AI3526	AI3526 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
36	1	PI 702 K35 1	BVPan HdrPress	IN WC	10	-5	2	-5	2	1	0	0.02	0	0	0	0	0	0	0	0	0	0
36	2	AI3602	AI3602 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
36	3	AI3603	AI3603 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
36	4	AI3604	AI3604 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
36	5	AI3605	AI3605 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
36	6	AI3606	AI3606 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0

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RCM	Pnt	Tag	Desc	Units	Hscan	Range		Plot		Hist	Alarm													
											Process		Hi		HiHi		Max		Low		Lo Lo		Min	
						lo	hi	lo	hi	def	alm	db	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri
36	7	PDI 702 K3 1	PVCell Dp	IN WC	10	-2	0	-2	0	1	0	0.01	-	0	-	0	-	0	-	0	-	0	-	0
36	8	ZI 702 K3 1	PVCellOtDpr%Opn	PERCENT	28800	0	100	0	100	1	0	0.5	-	0	-	0	-	0	-	0	-	0	-	0
36	9	A13609	A13609 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
36	10	PDI 702 K33 1A	BldExhA PreFtrDp	IN WC	7200	0	2	0	2	1	1	0.01	0.3	2	0.5	1	-	0	-0.25	2	-	0	-	0
36	11	PDI 702 K33 1B	BldExhB PreFtrDp	IN WC	7200	0	2	0	2	1	1	0.01	0.3	2	0.5	1	-	0	-0.25	2	-	0	-	0
36	12	PDI 702 K34 1A	BldExhA HepaDp	IN WC	7200	0	6	0	6	1	1	0.03	2	2	2.5	1	-	0	-0.75	2	-	0	-	0
36	13	PDI 702 K34 1B	BldExhB HepaDp	IN WC	7200	0	6	0	6	1	1	0.03	2	2	2.5	1	-	0	-0.75	2	-	0	-	0
36	14	A13614	A13614 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
36	15	II 702 K35 1A	BldFanA Current	AMP	28800	0	10	0	10	1	0	0.05	-	0	-	0	-	0	-	0	-	0	-	0
36	16	II 702 K35 1B	BldFanB Current	AMP	28800	0	10	0	10	1	0	0.05	-	0	-	0	-	0	-	0	-	0	-	0
36	17	A13617	A13617 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
36	18	A13618	A13618 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
36	19	A13619	A13619 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
36	20	FI 702 K3 1	BldStk MonFlow	SCFM	28800	0	2	0	2	1	1	0.01	-	0	-	0	-	0	0.3	2	-	0	-	0
36	21	FI 702 K3 2	BldStk RecFlow	SCFM	28800	0	2	0	2	1	1	0.01	-	0	-	0	-	0	0.3	2	-	0	-	0
36	22	FI 702 K3 3	BldStk Flow	SCFM	10	0	1050	0	1050	1	1	5.5	-	0	-	0	-	0	700	2	-70	2	-	0
36	23	RI 702 K3 1A	BldStk RadLog	DECADES	28800	0	5	0	5	0	1	0.02	-	0	-	0	-	0	-0.63	2	-	0	-	0
36	24	TI 702 K3 3	BldStk Temp	DEG F	3600	0	150	0	150	1	0	0.75	-	0	-	0	-	0	-	0	-	0	-	0
36	25	A13625	A13625 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
36	26	A13626	A13626 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
45	1	TI AY1 K48 1A	AY1CdSrInVapTemp	DEG F	7200	0	200	0	200	1	0	1	-	0	-	0	-	0	-	0	-	0	-	0
45	2	TI AY1 K48 1B	AY1CdSrOtVapTemp	DEG F	7200	0	200	0	200	1	0	1	-	0	-	0	-	0	-	0	-	0	-	0
45	3	A14503	A14503 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
45	4	A14504	A14504 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
45	5	A14505	A14505 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
45	6	TI AY1 EWR 1	AY1CdSrEWRtnTemp	DEG F	28800	0	150	0	150	1	0	0.75	-	0	-	0	-	0	-	0	-	0	-	0
45	7	TI AY1 EWS 1	AY1CdSrEWSupTemp	DEG F	28800	0	150	0	150	1	0	0.75	-	0	-	0	-	0	-	0	-	0	-	0

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RCM	Pnt	Tag	Desc	Units	Hscan	Range		Plot		Hist	Alarm															
						lo	hi	lo	hi		def	Process		Hi		HiHi		Max		Low		Lo Lo		Min		
						alm	db	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri			
45	8	AI4508	AI4508 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
45	9	AI4509	AI4509 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
45	10	AI4510	AI4510 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
45	11	AI4511	AI4511 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
45	12	AI4512	AI4512 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
45	13	AI4513	AI4513 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
45	14	AI4514	AI4514 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
45	15	TI AY2 K48 1A	AY2CdsrInVapTemp	DEG F	7200	0	200	0	200	1	0	1	-	0	-	0	-	0	-	0	-	0	-	0		
45	16	TI AY2 K48 1B	AY2CdsrOtVapTemp	DEG F	7200	0	200	0	200	1	0	1	-	0	-	0	-	0	-	0	-	0	-	0		
45	17	AI4517	AI4517 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
45	18	AI4518	AI4518 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
45	19	AI4519	AI4519 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
45	20	TI AY2 EWR 1	AY2CdsrEWRtnTemp	DEG F	28800	0	150	0	150	1	0	0.75	-	0	-	0	-	0	-	0	-	0	-	0		
45	21	TI AY2 EWS 1	AY2CdsrEWSupTemp	DEG F	28800	0	150	0	150	1	0	0.75	-	0	-	0	-	0	-	0	-	0	-	0		
45	22	AI4522	AI4522 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
45	23	AI4523	AI4523 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
45	24	AI4524	AI4524 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
45	25	AI4525	AI4525 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
45	26	AI4526	AI4526 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
46	1	FI AY1 K1 1	AY1Tank InFlow	SCFM	60	0	600	0	600	1	1	3	550	2	-	0	-	0	50	2	-	0	-	0		
46	2	AI4602	AI4602 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0		
46	3	PI AY1 K1 1	AY1Tank Press	IN WC	10	-6	4	-6	4	1	1	0.05	-0.5	2	-0.05	1	-	0	-3.5	2	-4	1	-	0		
46	4	PI AY1 K1 2	AY1Tank Press	IN WC	28800	-10	80	0	80	1	0	0.45	-	0	-	0	-	0	-	0	-	0	-	0		
46	5	ZI AY1 K1 1	AY1InFlwDpr%Opn	PERCENT	28800	0	100	0	100	1	0	0.5	-	0	-	0	-	0	-	0	-	0	-	0		
46	6	II AY1 K45 1	AY1Rec FanCurr	AMP	28800	0	10	0	10	1	0	0.05	-	0	-	0	-	0	-	0	-	0	-	0		
46	7	PDI AY1 K45 1	AY1Rec FanDp	IN WC	7200	0	25	0	25	1	1	0.12	24	2	-	0	-	0	-	0	-	0	-	0		
46	8	PDI AY1 K48 1	AY1Rec CdsrDp	IN WC	28800	0	20	0	20	1	1	0.1	11	2	-	0	-	0	2	3	-	0	-	0		

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RCM	Pnt	Tag	Desc	Units	Hscan	Range		Plot		Hist	Alarm													
											Process		Hi		HiHi		Max		Low		Lo Lo		Min	
						lo	hi	lo	hi	def	alm	db	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri
46	9	AI4609	AI4609 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
46	10	FI AY1 EWR 1	AY1 EW RtnFlow	GPM	28800	0	300	0	300	1	1	1.5	-	0	-	0	-	0	170	2	-	0	-	0
46	11	II AY1 EWP 1A	AY1 EW PmpACurr	AMP	28800	0	20	0	20	1	0	0.1	-	0	-	0	-	0	-	0	-	0	-	0
46	12	II AY1 EWP 1B	AY1 EW PmpBCurr	AMP	28800	0	20	0	20	1	0	0.1	-	0	-	0	-	0	-	0	-	0	-	0
46	13	AI4613	AI4613 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
46	14	AI4614	AI4614 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
46	15	FI AY2 K1 1	AY2Tank InFlow	SCFM	60	0	600	0	600	1	1	3	550	2	-	0	-	0	50	2	-	0	-	0
46	16	AI4616	AI4616 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
46	17	PI AY2 K1 1	AY2Tank Press	IN WC	10	-6	4	-6	4	1	1	0.05	-0.5	2	-0.05	1	-	0	-3.5	2	-4	1	-	0
46	18	PI AY2 K1 2	AY2Tank Press	IN WC	28800	-10	80	0	80	1	0	0.45	-	0	-	0	-	0	-	0	-	0	-	0
46	19	ZI AY2 K1 1	AY2InFlwDpr%Opn	PERCENT	28800	0	100	0	100	1	0	0.5	-	0	-	0	-	0	-	0	-	0	-	0
46	20	II AY2 K45 1	AY2Rec FanCurr	AMP	28800	0	10	0	10	1	0	0.05	-	0	-	0	-	0	-	0	-	0	-	0
46	21	PDI AY2 K45 1	AY2Rec FanDp	IN WC	7200	0	25	0	25	1	1	0.12	24	2	-	0	-	0	-	0	-	0	-	0
46	22	PDI AY2 K48 1	AY2Rec CdsrDp	IN WC	28800	0	20	0	20	1	1	0.1	11	2	-	0	-	0	2	3	-	0	-	0
46	23	AI4623	AI4623 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
46	24	FI AY2 EWR 1	AY2 EW RtnFlow	GPM	28800	0	300	0	300	1	1	1.5	-	0	-	0	-	0	170	2	-	0	-	0
46	25	II AY2 EWP 1A	AY2 EW PmpACurr	AMP	28800	0	20	0	20	1	0	0.1	-	0	-	0	-	0	-	0	-	0	-	0
46	26	II AY2 EWP 1B	AY2 EW PmpBCurr	AMP	28800	0	20	0	20	1	0	0.1	-	0	-	0	-	0	-	0	-	0	-	0
50	1	TI AZ1 K48 1A	AZ1CdsrInVapTemp	DEG F	7200	0	200	0	200	1	0	1	-	0	-	0	-	0	-	0	-	0	-	0
50	2	TI AZ1 K48 1B	AZ1CdsrOtVapTemp	DEG F	7200	0	200	0	200	1	0	1	-	0	-	0	-	0	-	0	-	0	-	0
50	3	AI5003	AI5003 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
50	4	AI5004	AI5004 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
50	5	AI5005	AI5005 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
50	6	TI AZ1 EWR 1	AZ1CdsrEWRtnTemp	DEG F	28800	0	150	0	150	1	0	0.75	-	0	-	0	-	0	-	0	-	0	-	0
50	7	TI AZ1 EWS 1	AZ1CdsrEWSupTemp	DEG F	28800	0	150	0	150	1	0	0.75	-	0	-	0	-	0	-	0	-	0	-	0
50	8	AI5008	AI5008 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
50	9	AI5009	AI5009 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0

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RCM	Pnt	Tag	Desc	Units	Hscan	Range		Plot		Hist	Alarm													
											Process		Hi		HiHi		Max		Low		Lo Lo		Min	
						lo	hi	lo	hi	def	alm	db	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri
50	10	AI5010	AI5010 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
50	11	AI5011	AI5011 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
50	12	AI5012	AI5012 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
50	13	AI5013	AI5013 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
50	14	AI5014	AI5014 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
50	15	TI AZ2 K48 1A	AZ2CdsrInVapTemp	DEG F	7200	0	200	0	200	1	0	1	-	0	-	0	-	0	-	0	-	0	-	0
50	16	TI AZ2 K48 1B	AZ2CdsrOtVapTemp	DEG F	7200	0	200	0	200	1	0	1	-	0	-	0	-	0	-	0	-	0	-	0
50	17	AI5017	AI5017 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
50	18	AI5018	AI5018 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
50	19	AI5019	AI5019 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
50	20	TI AZ2 EWR 1	AZ2CdsrEWRtnTemp	DEG F	28800	0	150	0	150	1	0	0.75	-	0	-	0	-	0	-	0	-	0	-	0
50	21	TI AZ2 EWS 1	AZ2CdsrEWSupTemp	DEG F	28800	0	150	0	150	1	0	0.75	-	0	-	0	-	0	-	0	-	0	-	0
50	22	AI5022	AI5022 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
50	23	AI5023	AI5023 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
50	24	AI5024	AI5024 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
50	25	AI5025	AI5025 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
50	26	AI5026	AI5026 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
51	1	FI AZ1 K1 1	AI1Tank InFlow	SCFM	60	0	600	0	600	1	1	3	550	2	-	0	-	0	50	2	-	0	-	0
51	2	AI5102	AI5102 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
51	3	PI AZ1 K1 1	AZ1Tank Press	IN WC	10	-6	4	-6	4	1	1	0.05	-0.5	2	-0.05	1	-	0	-3.5	2	-4	1	-	0
51	4	PI AZ1 K1 2	AZ1Tank Press	IN WC	28800	-10	80	0	80	1	0	0.45	-	0	-	0	-	0	-	0	-	0	-	0
51	5	ZI AZ1 K1 1	AZ1InFlwDpr%Opn	PERCENT	28800	0	100	0	100	1	0	0.5	-	0	-	0	-	0	-	0	-	0	-	0
51	6	II AZ1 K45 1	AZ1Rec FanCurr	AMP	28800	0	10	0	10	1	0	0.05	-	0	-	0	-	0	-	0	-	0	-	0
51	7	PDI AZ1 K45 1	AZ1Rec FanDp	IN WC	7200	0	25	0	25	1	1	0.12	24	2	-	0	-	0	-	0	-	0	-	0
51	8	PDI AZ1 K48 1	AZ1Rec CdsrDp	IN WC	28800	0	20	0	20	1	1	0.11	11	2	-	0	-	0	2	3	-	0	-	0
51	9	AI5109	AI5109 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
51	10	FI AZ1 EWR 1	AZ1 EW RtnFlow	GPM	28800	0	400	0	400	1	1	2	-	0	-	0	-	0	295	2	-	0	-	0

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RCM	Pnt	Tag	Desc	Units	Hscan	Range		Plot		Hist	Alarm													
											Process		Hi		HiHi		Max		Low		Lo Lo		Min	
						lo	hi	lo	hi	def	alm	db	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri
51	11	II AZ1 EWP 1A	AZ1 EW PmpACurr	AMP	28800	0	50	0	50	1	0	0.25	-	0	-	0	-	0	-	0	-	0	-	0
51	12	II AZ1 EWP 1B	AZ1 EW PmpBCurr	AMP	28800	0	50	0	50	1	0	0.25	-	0	-	0	-	0	-	0	-	0	-	0
51	13	AI5113	AI5113 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
51	14	AI5114	AI5114 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
51	15	FI AZ2 K1 1	AZ2Tank InFlow	SCFM	60	0	600	0	600	1	1	3	550	2	-	0	-	0	50	2	-	0	-	0
51	16	AI5116	AI5116 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
51	17	PI AZ2 K1 1	AZ2Tank Press	IN WC	10	-6	4	-6	4	1	1	0.05	-0.5	2	-0.05	1	-	0	-3.5	2	-4	1	-	0
51	18	PI AZ2 K1 2	AZ2Tank Press	IN WC	28800	-10	80	0	80	1	0	0.45	-	0	-	0	-	0	-	0	-	0	-	0
51	19	ZI AZ2 K1 1	AZ2InFlwDpr%Opn	PERCENT	28800	0	100	0	100	1	0	0.5	-	0	-	0	-	0	-	0	-	0	-	0
51	20	II AZ2 K45 1	AZ2Rec FanCurr	AMP	28800	0	10	0	10	1	0	0.05	-	0	-	0	-	0	-	0	-	0	-	0
51	21	PDI AZ2 K45 1	AZ2Rec FanDp	IN WC	7200	0	25	0	25	1	1	0.12	24	2	-	0	-	0	-	0	-	0	-	0
51	22	PDI AZ2 K48 1	AZ2Rec CdsrDp	IN WC	28800	0	20	0	20	1	1	0.1	11	2	-	0	-	0	2	3	-	0	-	0
51	23	AI5123	AI5123 DESCRIPTION	ENG UNIT	0	0	100	0	100	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
51	24	FI AZ2 EWR 1	AZ2 EW RtnFlow	GPM	28800	0	300	0	300	1	1	1.5	-	0	-	0	-	0	170	2	-	0	-	0
51	25	II AZ2 EWP 1A	AZ2 EW PmpACurr	AMP	28800	0	20	0	20	1	0	0.1	-	0	-	0	-	0	-	0	-	0	-	0
51	26	II AZ2 EWP 1B	AZ2 EW PmpBCurr	AMP	28800	0	20	0	20	1	0	0.1	-	0	-	0	-	0	-	0	-	0	-	0

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ATTACHMENT D
MICON AUTOMATION SYTEM
ANALOG OUTPUTS

Table Field Descriptors

RCM		Micon Remote Controller Module - Integer Value
Pnt		Point number of the Controller - Integer Value
Tag Name		Variable name -- Character String
Description		Description of the variable - Character String
Range	lo	Range low value - floating point number
	hi	Range high value - floating point number

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RCM	Pnt	Tag	Desc	Range lo	Range hi
2	1	FC AZ1 K1 2	TankVent Flow	0	100
2	2	FC AZ2 K1 2	TankVent Flow	0	100
2	3	AO0203	AO0203 DESCRIPTION	0	100
2	4	AO0204	AO0204 DESCRIPTION	0	100
3	1	TDC AZ K12 1A	PvHtr1A Temp	0	100
3	2	AO0302	AO0302 DESCRIPTION	0	100
3	3	AO0303	AO0303 DESCRIPTION	0	100
3	4	PC AZ K1 1A	PvHdr1A Press	0	100
13	1	FC AY1 K1 2	TankVent Flow	0	100
13	2	FC AY2 K1 2	TankVent Flow	0	100
13	3	AO1303	AO1303 DESCRIPTION	0	100
13	4	AO1304	AO1304 DESCRIPTION	0	100
14	1	TDC AZ K12 1B	PvHtr1B Temp	0	100
14	2	AO1402	AO1402 DESCRIPTION	0	100
14	3	AO1403	AO1403 DESCRIPTION	0	100
14	4	PC AZ K1 1B	PvHdr1B Press	0	100
24	1	AO2401	AO2401 DESCRIPTION	0	100
24	2	AO2402	AO2402 DESCRIPTION	0	100
24	3	AO2403	AO2403 DESCRIPTION	0	100
24	4	AO2404	AO2404 DESCRIPTION	0	100
35	1	PDC 702 K2 2	E/iRmA Dp	0	100
35	2	PDC 702 K2 3	E/iRmB Dp	0	100
35	3	AO3503	AO3503 DESCRIPTION	0	100

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RCM	Pnt	Tag	Desc	Range lo	Range hi
35	4	AO3504	AO3504 DESCRIPTION	0	100
36	1	PDC 702 K3 1	Cell Dp	0	100
36	2	AO3602	AO3602 DESCRIPTION	0	100
36	3	PC 702 K35 1A	BvFanA Press	0	100
36	4	PC 702 K35 1B	BvFanB Press	0	100
45	1	AO4501	AO4501 DESCRIPTION	0	100
45	2	AO4502	AO4502 DESCRIPTION	0	100
45	3	AO4503	AO4503 DESCRIPTION	0	100
45	4	AO4504	AO4504 DESCRIPTION	0	100
46	1	PC AY1 K1 1	TkAirIn Press	0	100
46	2	AO4602	AO4602 DESCRIPTION	0	100
46	3	PC AY2 K1 1	TkAirIn Press	0	100
46	4	AO4604	AO4604 DESCRIPTION	0	100
50	1	AO5001	AO5001 DESCRIPTION	0	100
50	2	AO5002	AO5002 DESCRIPTION	0	100
50	3	AO5003	AO5003 DESCRIPTION	0	100
50	4	AO5004	AO5004 DESCRIPTION	0	100
51	1	PC AZ1 K1 1	TkAirIn Press	0	100
51	2	AO5102	AO5102 DESCRIPTION	0	100
51	3	PC AZ2 K1 1	TkAirIn Press	0	100
51	4	AO5104	AO5104 DESCRIPTION	0	100

ATTACHMENT E
MICON AUTOMATION SYTEM
VIRTUAL ANALOGS

Table Field Descriptors

RCM		Micon Remote Controller Module - Integer Value
Pnt		Point number of the Controller - Integer Value
Tag Name		Variable name -- Character String
Description		Description of the variable - Character String
Units		Engineering Units of the variable
Hscan		Data Historian Scan Rate -- Floating point number in seconds
Range	lo	Range low value - floating point number
	hi	Range high value - floating point number
Plot	lo	Plot scale low value - floating point number
	hi	Plot scale high value - floating point number
Hist		Historical definition - integer value
Process	alm	Process transmitter alarm - boolean value (1 if variable has alarm)
	acc	Allow operator change - a boolean value
	db	Transmitter alarm deadband
Hi	setpnt	Transmitter high alarm setpoint - floating point value
	pri	Transmitter high alarm priority - integer value ¹
HiHi	setpnt	Transmitter high-high alarm setpoint - floating point value
	pri	Transmitter high-high alarm priority - integer value ¹
Max	setpnt	Transmitter Max alarm setpoint - floating point value
	pri	Transmitter Max alarm priority - integer value ¹
Low	setpnt	Transmitter Low alarm setpoint - floating point value
	pri	Transmitter Low alarm priority - integer value ¹
Lo Lo	setpnt	Transmitter Low-Low alarm setpoint - floating point value
	pri	Transmitter Low-Low alarm priority - integer value ¹
Min	setpnt	Transmitter Min alarm setpoint - floating point value
	pri	Transmitter Min alarm priority - integer value ¹

¹ 0=normal "Dim grey", 1=urgent "Red", 2=caution "Yellow", 3=information "White".

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RCM	Pnt	Tag	Desc	Units	Hscan	Alarm																			
						Range		Plot		Hist	Process alarm		Hi		hihi		Max		Low		LoLo		Min		
						lo	hi	lo	hi		def	alm	acc	db	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt
1	1	YC U32 1 10	RcmDr10 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
1	2	YC U32 1 9	RcmDr9 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
1	3	YQ RCM A2 1	RcmA2 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
1	4	YQ RCM A3 1	RcmA3 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
1	5	YQ RCM D6 1	RcmD6 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
1	6	YQ RCM D7 1	RcmD7 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
1	7	YQ RCM DR9 1	RcmDr9 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
1	8	YC U32 1 1	U321 CommVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
1	9	YQ U32 12 1	U3212 CommVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
1	10	YQ RCM DR10 1	RcmDr 10 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
2	1	YC RCM A2 1	RcmA2 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
2	2	FC AZ1 K1 2V1	AZ1Vent HiHeatSP	SCFM	0	0	0	0	0	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
2	3	FC AZ1 K1 2V2	AZ1Vent RecVntSP	SCFM	0	0	0	0	0	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
2	4	FC AZ2 K1 2V1	AZ2Vent HiHeatSP	SCFM	0	0	0	0	0	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
2	5	FC AZ2 K1 2V2	AZ2Vent RecVntSP	SCFM	0	0	0	0	0	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
2	6	FIC AZ1K1 2 OUT	LOOP OUTPUT	ENG UNIT	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
2	7	FIC AZ1K1 2 SP	LOOP SETPT	ENG UNIT	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
2	8	FIC AZ2K1 2 OUT	LOOP OUTPUT	ENG UNIT	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
2	9	FIC AZ2K1 2 SP	LOOP SETPT	ENG UNIT	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
3	1	KQI AZ K15 1A	PVFan1A RunTime	HR	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
3	2	YC RCM A3 1	RcmA3 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
3	3	TDI AZ K12 1A	PvHtr1A TempDiff	DEGREES	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
3	6	PIC AZ K11A OUT	LOOP OUT	ENG UNIT	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
3	7	PIC AZ K11A SP	LOOP SP	ENG UNIT	0	5	0	5	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
3	8	TDICAZK121A OUT	LOOP OUT	ENG UNIT	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
3	9	TDICAZK121A SP	LOOP SP	ENG UNIT	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
6	1	YC RCM D6 1	RcmD6 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0

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RCM	Pnt	Tag	Desc	Units	Hscan	Range		Plot	Hist	Process alarm				Hi				Max				Low				LoLo				
						lo	hi			def	alm	acc	db	secpnt	pri	secpnt	pri	secpnt	pri	secpnt	pri	secpnt	pri	secpnt	pri	secpnt	pri	secpnt	pri	
						lo	hi	lo	hi	lo	hi	lo	hi	lo	hi	lo	hi	lo	hi	lo	hi	lo	hi	lo	hi	lo	hi			
7	1	YC RCM D7 1	RemD7 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
9	1	YC RCM DR9 1	RemDr9 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
9	2	YC U32 1 9	RemDr9 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
10	1	YC RCM DR10 1	RemDr10 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
10	2	YC U32 1 10	RemDr10 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
12	1	YC U32 12 20	RemDr20 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
12	2	YC U32 12 21	RemDr21 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
12	3	YC RCM A13 1	RemA13 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
12	4	YC RCM A14 1	RemA14 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
12	5	YC RCM D17 1	RemD17 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
12	6	YC RCM D18 1	RemD18 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
12	7	YC RCM DR20 1	RemDr20 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
12	8	YC RCM DR21 1	RemDr21 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
12	9	YC U32 12 1	U3212 CommVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
12	10	YC U32 1 1	U321 CommVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
13	1	YC RCM A13 1	RemA13 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
13	2	FC AY1 K1 2V1	AY1Vent HIHeatSP	SCFM	0	0	0	0	0	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
13	3	FC AY1 K1 2V2	AY1Vent RecVntSP	SCFM	0	0	0	0	0	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
13	4	FC AY2 K1 2V1	AY2Vent HIHeatSP	SCFM	0	0	0	0	0	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
13	5	FC AY2 K1 2V2	AY2Vent RecVntSP	SCFM	0	0	0	0	0	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
13	6	FICAY1K1 2 OUT	LOOP OUT	ENG UNIT	0	0	0	0	0	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
13	7	FICAY1K1 2 SP	LOOP SETPT	ENG UNIT	0	0	0	0	0	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
13	8	FICAY2K1 2 OUT	LOOP OUT	ENG UNIT	0	0	0	0	0	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
13	9	FICAY2K1 2 SP	LOOP SETPT	ENG UNIT	0	0	0	0	0	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
14	1	FQI AZ K1 1	PVStkSmpFlowTot	xIK SCF	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
14	2	FQI AZ K1 2	PVStkRecFlowTot	xIK SCF	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
14	3	FQI AZ K1 3	PV SIK FlowTot	xIM SCF	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-

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RCM	Pnt	Tag	Desc	Units	Hscan	Alarm																				
						Range		Plot		Hist	Process alarm			Hi		hihi		Max		Low		LoLo		Min		
						lo	hi	lo	hi		def	alm	acc	db	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri
14	4	KQI AZ K15 1B	PvFan1B RunTime	HR	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-
14	5	RI AZ K1 1	PVStk Rad	DPM/F3	3600	0	0	0	0	1	0	1	10	-	0	-	0	-	0	-	0	-	0	-	0	-
14	6	PICAZK1 1B OUT	LOOP OUT	ENG UNIT	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-
14	7	PICAZK1 1B SP	LOOP SETPT	ENG UNIT	0	5	0	5	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-
14	8	TDICAZK12 1B OUT	LOOP OUT	ENG UNIT	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-
14	9	TDICAZK12 1B SP	LOOP SETPT	ENG UNIT	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-
14	10	TDI AZ K12 1B	PvHtr1B TempDiff	DEGREES	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-
17	1	YC RCM D17 1	RcmD17 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0	-
18	1	YC RCM D18 1	RcmD18 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0	-
20	1	YC RCM DR21 1	RcmDr21 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0	-
20	2	YQ U32 12 20	RcmDr20 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-
21	1	YC RCM DR20 1	RcmDr20 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0	-
21	2	YQ U32 12 21	RcmDr21 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-
23	1	YC U32 23 31	RcmDr31 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0	-
23	2	YC U32 23 54	RcmDr54 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0	-
23	3	YQ RCM A24 1	RcmA2 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-
23	4	YQ RCM A51 1	RcmA51 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-
23	5	YQ RCM D28 1	RcmD28 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-
23	6	YQ RCM D52 1	RcmD52 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-
23	7	YQ RCM D53 1	RcmD53 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-
23	8	YQ RCM DR31 1	RcmDr31 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-
23	9	YQ RCM DR54 1	RcmDr54 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-
23	10	YQ RCM F50 1	RcmF50 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-
23	11	YQ U32 34 1	U32-34 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-
24	1	KQI AZ CWP 1A	CWPump1ARunTime	HR	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-
24	2	KQI AZ CWP 1B	CWPump1BRunTime	HR	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-
24	3	KQI AZ CWR 1	CWRtn FlowTotl	x1M GAL	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0	-

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RCM	Pnt	Tag	Desc	Units	Hscan	Alarm																			
						Range		Plot		Hist	Process alarm		Hi		hihi		Max		Low		LoLo		Min		
						lo	hi	lo	hi		def	alm	acc	db	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt
24	4	FOI AZ PC 1	SelPotOtFlowTotl	GAL	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
24	5	FOI AZ RW 1	RawWater FlowTotl	GAL	3600	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
24	6	YC RCM A24 1	RcmA2 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
24	7	RI AZ K19 1	PVHeme Rad	mR/Hr	3600	0	0	0	0	1	1	0	10	500	2	-	0	-	0	-	0	-	0	-	0
28	1	YC RCM D28 1	RcmD28 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
31	1	YC RCM DR31 1	RcmDr31 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
31	2	YQ U32 23 31	RcmDr31 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
34	1	YC U32 34 40	RcmDr40 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
34	2	YC U32 34 49	RcmDr49 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
34	3	YQ RCM A35 1	RcmA35 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
34	4	YQ RCM A36 1	RcmA36 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
34	5	YQ RCM A46 1	RcmA46 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
34	6	YQ RCM D39 1	RcmD39 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
34	7	YQ RCM D47 1	RcmD47 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
34	8	YQ RCM D48 1	RcmD48 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
34	10	YQ RCM DR40 1	RcmDr40 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
34	11	YQ RCM DR49 1	RcmDr49 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
34	12	YQ RCM F45 1	RcmF45 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
34	13	YQ U32 23 1	U32-23 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
35	1	PDI 702 K2 7	VntC/FtrRms Dp	IN WC	28800	2	0	2	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
35	2	PDI 702 K2 8	FtrRms/ SKRm Dp	IN WC	28800	0.5	0	0.5	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
35	3	YC RCM A35 1	RcmA35 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
35	6	PDIC702K22 OUT	LOOP OUT	ENG UNIT	0	0	0	0	0	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
35	7	PDIC702K22 SP	LOOP SETPT	ENG UNIT	0	1	0	1	0	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
35	8	PDIC702K23 OUT	LOOP OUT	ENG UNIT	0	0	0	0	0	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
35	9	PDIC702K23 SP	LOOP SETPT	ENG UNIT	0	1	0	1	0	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
36	1	RI 702 K3 1	BldStk Rad	DPM/Ft3	3600	0	0	0	0	1	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0

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RCM	Pnt	Tag	Desc	Units	Hscan	Alarm																			
						Range		Plot		Hist	Process alarm		Hi		hihi		Max		Low		LoLo		Min		
						lo	hi	lo	hi		def	alm	acc	db	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt
36	9	FQI 702 K3 1	BVStkMonFlowTotl	x1K SCF	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
36	10	FQI 702 K3 2	BVStkRecFlowTotl	x1K SCF	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
36	11	FQI 702 K3 3	BVStk FlowTotl	x1M SCF	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
36	12	KQI 702 K35 1A	BVFan1A RunTime	HR	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
36	13	KQI 702 K35 1B	BVFan1B RunTime	HR	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
36	14	YC RCM A36 1	RcmA36 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
36	15	PIC702K35A OUT	LOOP OUT	PERCENT	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
36	16	PIC702K35A SP	LOOP SETPT	IN WC	0	5	0	5	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
36	17	PIC702K35B OUT	LOOP OUT	PERCENT	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
36	18	PIC702K35B SP	LOOP SETPT	IN WC	0	5	0	5	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
36	19	PDIC702K31 OUT	OUTPUT	ENG UNIT	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
36	20	PDIC702K31 SP	SETPOINT	ENG UNIT	0	1	0	1	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
39	1	YC RCM D39 1	RcmD39 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
40	1	YC RCM DR40 1	RcmDr40 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
40	2	YQ U32 34 40	RcmDr40 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
45	1	YC RCM F45 1	RcmF45 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
46	1	KQI AY1 EWP 1A	AY1EWPmpARunTime	HR	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
46	2	KQI AY1 EWP 1B	AY1EWPmpBRunTime	HR	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
46	3	FQI AY1 EWR 1	AY1EWRtnFlowTotl	x1M GAL	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
46	4	KQI AY2 EWP 1A	AY2EWPmpARunTime	HR	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
46	5	KQI AY2 EWP 1B	AY2EWPmpBRunTime	HR	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
46	6	FQI AY2 EWR 1	AY2EWRtnFlowTotl	x1K GAL	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
46	7	KQI AY1 K45 1	AY1 Fan RunTime	HR	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
46	8	KQI AY2 K45 1	AY2 Fan RunTime	HR	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0

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RCM	Pnt	Tag	Desc	Units	Hscan	Alarm																			
						Range		Plot		Hist	Process alarm		Hi		hihi		Max		Low		LoLo		Min		
						lo	hi	lo	hi		def	alm	acc	db	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt
46	9	YC RCM A46 1	RcmA46 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
46	12	PICAY1K11 OUT	LOOP OUT	ENG UNIT	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
46	13	PICAY1K11 SP	LOOP SETPT	ENG UNIT	0	6	4	6	4	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
46	14	PICAY2K11 OUT	LOOP OUT	ENG UNIT	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
46	15	PICAY2K11 SP	LOOP SETPT	ENG UNIT	0	6	4	6	4	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
47	1	YC RCM D47 1	RcmD47 FBusVer	COUNTS	0	0	2	0	2	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
48	1	YC RCM D48 1	RcmD48 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
49	1	YC RCM DR49 1	RcmDr49 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
49	2	YQ U32 34 49	RcmDr49 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
50	1	YC RCM F50 1	RcmF50 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
51	1	KQI AZ1 EWP 1A	AZ1EWPmpARunTime	HR	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
51	2	KQI AZ1 EWP 1B	AZ1EWPmpBRunTime	HR	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
51	3	FQI AZ1 EWR 1	AZ1EWRtnFlowTotl	x1M GAL	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
51	4	KQI AZ2 EWP 1A	AZ2EWPmpARunTime	HR	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
51	5	KQI AZ2 EWP 1B	AZ2EWPmpBRunTime	HR	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
51	6	FQI AZ2 EWR 1	AZ2EWRtnFlowTotl	x1M GAL	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
51	7	KQI AZ1 K45 1	AZ1Fan RunTime	HR	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
51	8	KQI AZ2 K45 1	AZ2Fan RunTime	HR	28800	0	0	0	0	1	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
51	9	YC RCM A51 1	RcmA51 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0
51	12	PICAZ1K11 OUT	LOOP OUT	ENG UNIT	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
51	13	PICAZ1K11 SP	LOOP SETPT	ENG UNIT	0	6	4	6	4	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
51	14	PICAZ2K11 OUT	LOOP OUT	ENG UNIT	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
51	15	PICAZ2K11 SP	LOOP SETPT	ENG UNIT	0	6	4	6	4	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-	0
52	1	YC RCM D52 1	RcmD52 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0	-	0

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RCM	Pnt	Tag	Desc	Units	Hscan	Alarm																			
						Range		Plot		Hist	Process alarm			Hi		hihi		Max		Low		LoLo		Min	
											alm	acc	db	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri	setpnt	pri
53	1	YC RCM D53 1	RcmD53 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0		
54	1	YC RCM DR54 1	RcmDr54 FBusVer	COUNTS	0	0	2	0	2	0	0	1	0	-	0	-	0	-	0	-	0	-	0		
54	2	YQ U32 23 54	RcmDr54 FBusVer	COUNTS	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	-	0	-	0		

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ATTACHMENT F
MICON AUTOMATION SYTEM
LOOP DEFINITIONS

Table Field Descriptors

RCM		Micon Remote Controller Module - Integer Value
Pnt		Point number of the Controller - Integer Value
Tag Name		Variable name -- Character String
Description		Description of the variable - Character String
Units		Engineering Units of the variable
Lscan		Loop Scan Rate -- Floating point number in seconds
Range	lo	Loop scale low value - floating point number
	hi	Loop scale high value - floating point number
Gain		Loop Gain - floating point number
Integral Rep_min		Loop integral value -floating point number
Deriv Rate		Loop Derivative value -floating point number
Dead Band		Process variable dead band - floating point value

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RCM	Pnt	Tag	Desc	Units	Lscan	Range		Gain	Integral	Deriv	Dead Band
						Lo	Hi		Rep min	Rate	
1	1	LP0101	LP0101 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
1	2	LP U32 1 1	U32-1 Loop1	ENG UNIT	0.3	0	100	0.2	10	0	0
1	3	LP U32 1 2	U32-1 Loop2	ENG UNIT	0.3	0	100	0.2	10	0	0
1	4	LP U32 1 3	U32-1 Loop3	ENG UNIT	0.3	0	100	0.2	10	0	0
1	5	LP U32 1 6	U32-1 Loop6	ENG UNIT	0.3	0	100	0.2	10	0	0
1	6	LP U32 1 7	U32-1 Loop7	ENG UNIT	0.3	0	100	0.2	10	0	0
1	7	LP U32 1 9A	U32-1 Loop9A	ENG UNIT	0.3	0	100	0.2	10	0	0
1	8	LP U32 1 9B	U32-1 Loop9B	ENG UNIT	0.3	0	100	0.2	10	0	0
1	9	LP U32 1 10A	U32-1 Loop10A	ENG UNIT	0.3	0	100	0.2	10	0	0
1	10	LP U32 1 10B	U32-1 Loop10B	ENG UNIT	0.3	0	100	0.2	10	0	0
1	11	LP AZ K12 1A	PvHtr1A Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
1	12	LP AZ K15 1A	PvFan1A Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
1	13	LP AZ K1 1A	PvDmpr1A Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
1	14	LP AZ K1 1AR	PvRstr1A Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
1	15	LP AZ K1 1M	PvMacro Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
1	16	LP AZ K1 2A	PvDmpr2A Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
1	17	LP AZ K1 3A	PvFtr1A Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
1	18	LP U32 1 24	U32-1 LOOP18	ENG UNIT	0.3	0	100	0.2	10	0	0
1	19	LP U32 1 25	u32-1 loop19	ENG UNIT	0.3	0	100	0.2	10	0	0
1	20	LP0120	LP0120 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
1	21	LP0121	LP0121 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
1	22	LP0122	LP0122 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
1	23	LP0123	LP0123 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0

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RCM	Pnt	Tag	Desc	Units	Lscan	Range		Gain	Integral	Deriv	Dead Band
						Lo	Hi		Rep min	Rate	
1	24	LP0124	LP0124	ENG UNIT	0.3	0	100	0.2	10	0	0
1	25	LP0125	LP0125	ENG UNIT	0.3	0	100	0.2	10	0	0
2	1	LP0201	LP0201 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
2	2	LP RCM A2 2	RcmA-2 Loop2	ENG UNIT	0.1	0	100	0.2	10	0	0
2	3	LP RCM A2 3	RcmA-2 Loop3	ENG UNIT	0.3	0	100	0.2	10	0	0
2	4	FIC AZ1 K1 2	AZ1Vent FlowCntl	SCFM	0.3	0	700	0.24	7	0.04	0
2	5	FIC AZ2 K1 2	AZ2Vent FlowCntl	SCFM	0.3	0	700	0.24	7	0.04	0
2	6	LP0206	LP0206 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
2	7	LP RCM A2 15	RcmA-2 KpAlive	ENG UNIT	0.3	0	100	0.2	10	0	0
2	8	LP0208	LP0208 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
2	9	LP0209	LP0209 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
2	10	LP0210	LP0210 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
2	11	LP0211	LP0211 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
2	12	LP0212	LP0212 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
2	13	LP0213	LP0213 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
2	14	LP0214	LP0214 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
2	15	LP0215	LP0215	ENG UNIT	0.3	0	100	0.2	10	0	0
3	1	LP0301	LP0301 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
3	2	LP RCM A3 2	RcmA-3 Loop2	ENG UNIT	0.1	0	100	0.2	10	0	0
3	3	LP RCM A3 3	RcmA-3 Loop3	ENG UNIT	0.3	0	100	0.2	10	0	0
3	4	KQ AZ K15 1A	PvFan1A RunTime	ENG UNIT	0.3	0	100	0.2	10	0	0
3	5	PIC AZ K1 1A	PVFan1A PresCntl	IN WC	0.3	-35	0	0.7	8	0.02	0
3	6	TDIC AZ K12 1A	PVHtr1A TempCntl	DEG F	0.3	0	50	0.1	1	1	0.25

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RCM	Pnt	Tag	Desc	Units	Lscan	Range		Gain	Integral	Deriv	Dead Band
						Lo	Hi		Rep min	Rate	
3	7	LP0307	LP0307 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
3	8	LP RCM A3 15	RcmA-3 KpAlive	ENG UNIT	0.3	0	100	0.2	10	0	0
3	9	LP0309	LP0309 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
3	10	LP0310	LP0310 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
3	11	LP0311	LP0311 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
3	12	LP0312	LP0312 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
3	13	LP0313	LP0313 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
3	14	LP0314	LP0314 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
3	15	LP0315	LP0315	ENG UNIT	0.3	0	100	0.2	10	0	0
6	1	LP0601	LP0601 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
6	2	LP RCM D6 2	RcmD-6 Loop2	ENG UNIT	0.3	0	100	0.2	10	0	0
6	3	LP RCM D6 3	RcmD-6 Loop3	ENG UNIT	0.3	0	100	0.2	10	0	0
6	4	LP AZ K1WD 1A	PvDmprWD Loop1A	ENG UNIT	0.3	0	100	0.2	10	0	0
6	5	LP RCM D6 15	RcmD-6 KpAlive	ENG UNIT	0.3	0	100	0.2	10	0	0
6	6	LP0606	LP0606 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
6	7	LP0607	LP0607 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
6	8	LP0608	LP0608 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
6	9	LP0609	LP0609 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
6	10	LP0610	LP0610 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
6	11	LP0611	LP0611 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
6	12	LP0612	LP0612 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
6	13	LP0613	LP0613 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
6	14	LP0614	LP0614 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0

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RCM	Pnt	Tag	Desc	Units	Lscan	Range		Gain	Integral	Deriv	Dead
						Lo	Hi		Rep min		
6	15	LP0615	LP0615	ENG UNIT	0.3	0	100	0.2	10	0	0
7	1	LP0701	LP0701 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
7	2	LP RCM D7 2	RcmD-7 Loop2	ENG UNIT	0.3	0	100	0.2	10	0	0
7	3	LP AZ EPR 1	StdbyPwr Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
7	4	LP RCM D7 15	RcmD-7 KpAlive	ENG UNIT	0.3	0	100	0.2	10	0	0
7	5	LP0705	LP0705 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
7	6	LP0706	LP0706 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
7	7	LP0707	LP0707 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
7	8	LP0708	LP0708 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
7	9	LP0709	LP0709 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
7	10	LP0710	LP0710 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
7	11	LP0711	LP0711 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
7	12	LP0712	LP0712 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
7	13	LP0713	LP0713 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
7	14	LP0714	LP0714 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
7	15	LP0715	LP0715	ENG UNIT	0.3	0	100	0.2	10	0	0
9	1	LP0901	LP0901 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
9	2	LP RCM DR9 2A	RcmDr-9 Loop2A	ENG UNIT	0.3	0	100	0.2	10	0	0
9	3	LP RCM DR9 2B	RcmDr-9 Loop2B	ENG UNIT	0.3	0	100	0.2	10	0	0
9	4	LP AZ K12 1A1	PvHtr1A Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
9	5	LP AZ K1 1A1	PvDmpr1A Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
9	6	LP AZ K1 2A1	PvDmpr2A Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
9	7	LP RCM DR9 15	RcmDr-9 KpAlive	ENG UNIT	0.3	0	100	0.2	10	0	0

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RCM	Pnt	Tag	Desc	Units	Lscan	Range		Gain	Integral	Deriv	Dead Band
						Lo	Hi		Rep min	Rate	
9	8	LP0908	LP0908 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
9	9	LP0909	LP0909 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
9	10	LP0910	LP0910 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
9	11	LP0911	LP0911 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
9	12	LP0912	LP0912 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
9	13	LP0913	LP0913 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
9	14	LP0914	LP0914 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
9	15	LP0915	LP0915	ENG UNIT	0.3	0	100	0.2	10	0	0
10	1	LP1001	LP1001 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
10	2	LP RCM DR10 2A	RcmDr-10 Loop2A	ENG UNIT	0.3	0	100	0.2	10	0	0
10	3	LP RCM DR10 2B	RcmDr-10 Loop2B	ENG UNIT	0.3	0	100	0.2	10	0	0
10	4	LP 702 K2 6	StkMonRm Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
10	5	LP 702 K2 7	E/iRmA Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
10	6	LP AZ K15 1A1	PvFan1A Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
10	7	LP AZ K1WD 2A	PvDmprWD Loop2A	ENG UNIT	0.3	0	100	0.2	10	0	0
10	8	LP RCM DR10 15	RcmDr-10 KpAlive	ENG UNIT	0.3	0	100	0.2	10	0	0
10	9	LP1009	LP1009 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
10	10	LP1010	LP1010 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
10	11	LP1011	LP1011 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
10	12	LP1012	LP1012 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
10	13	LP1013	LP1013 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
10	14	LP1014	LP1014 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
10	15	LP1015	LP1015	ENG UNIT	0.3	0	100	0.2	10	0	0

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RCM	Pnt	Tag	Desc	Units	Lscan	Range		Gain	Integral	Deriv	Dead Band
						Lo	Hi		Rep min	Rate	
12	1	LP1201	LP1201 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
12	2	LP U32 12 1	U32-12 Loop1	ENG UNIT	0.3	0	100	0.2	10	0	0
12	3	LP U32 12 13	U3212 Loop13	ENG UNIT	0.3	0	100	0.2	10	0	0
12	4	LP U32 12 14	U3212 Loop14	ENG UNIT	0.3	0	100	0.2	10	0	0
12	5	LP U32 12 17	U3212 Loop17	ENG UNIT	0.3	0	100	0.2	10	0	0
12	6	LP U32 12 18	U3212 Loop18	ENG UNIT	0.3	0	100	0.2	10	0	0
12	7	LP U32 12 20A	U3212 Loop20A	ENG UNIT	0.3	0	100	0.2	10	0	0
12	8	LP U32 12 20B	U3212 Loop20B	ENG UNIT	0.3	0	100	0.2	10	0	0
12	9	LP U32 12 21A	U3212 Loop21A	ENG UNIT	0.3	0	100	0.2	10	0	0
12	10	LP U32 12 21B	U3212 Loop21B	ENG UNIT	0.3	0	100	0.2	10	0	0
12	11	LP AZ K12 1B	PvHtr1B Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
12	12	LP AZ K15 1B	PvFan1B Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
12	13	LP AZ K1 1B	PvDmpr1B Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
12	14	LP AZ K1 1BR	PvRstrtB Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
12	15	LP AZ K1 2B	PvDmpr2B Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
12	16	LP AZ K1 3b	PvFiltr1B Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
12	17	LP U32 12 24	U3212 Loop24	ENG UNIT	0.3	0	100	0.2	10	0	0
12	18	LP U32 12 25	U3212 Loop25	ENG UNIT	0.3	0	100	0.2	10	0	0
12	19	LP1219	LP1219 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
12	20	LP1220	LP1220 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
12	21	LP1221	LP1221 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
12	22	LP1222	LP1222 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
12	23	LP1223	LP1223 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0

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RCM	Pnt	Tag	Desc	Units	Lscan	Range		Gain	Integral	Deriv	Dead Band
						Lo	Hi		Rep_min	Rate	
12	24	LP1224	LP1224	ENG UNIT	0.3	0	100	0.2	10	0	0
12	25	LP1225	LP1225	ENG UNIT	0.3	0	100	0.2	10	0	0
13	1	LP1301	LP1301 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
13	2	LP RCM A13 2	RcmA-13 Loop2	ENG UNIT	0.1	0	100	0.2	10	0	0
13	3	LP RCM A13 3	RcmA-13 Loop3	ENG UNIT	0.3	0	100	0.2	10	0	0
13	4	FIC AY1 K1 2	AY1Vent FlowCntl	SCFM	0.3	0	700	0.24	7	0.04	0
13	5	FIC AY2 K1 2	AY2Vent FlowCntl	SCFM	0.3	0	700	0.24	7	0.04	0
13	6	LP1306	LP1306 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
13	7	LP RCM A13 15	RcmA-13 KpAlive	ENG UNIT	0.3	0	100	0.2	10	0	0
13	8	LP1308	LP1308 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
13	9	LP1309	LP1309 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
13	10	LP1310	LP1310 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
13	11	LP1311	LP1311 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
13	12	LP1312	LP1312 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
13	13	LP1313	LP1313 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
13	14	LP1314	LP1314 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
13	15	LP1315	LP1315	ENG UNIT	0.3	0	100	0.2	10	0	0
14	1	LP1401	LP1401 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
14	2	LP RCM A14 2	RcmA-14 Loop2	ENG UNIT	0.1	0	100	0.2	10	0	0
14	3	LP RCM A14 3	RcmA-14 Loop3	ENG UNIT	0.3	0	100	0.2	10	0	0
14	4	FQ AZ K1 1	PvStk MonFlow	ENG UNIT	0.3	0	100	0.2	10	0	0
14	5	FQ AZ K1 2	PvStk RecFlow	ENG UNIT	0.3	0	100	0.2	10	0	0
14	6	FQ AZ K1 3	PvStk Flow	ENG UNIT	0.3	0	100	0.2	10	0	0

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RCM	Pnt	Tag	Desc	Units	Lscan	Range		Gain	Integral	Deriv	Dead Band
						Lo	Hi		Rep min	Rate	
14	7	KQ AZ K15 1B	PvFan1B RunTime	ENG UNIT	0.3	0	100	0.2	10	0	0
14	8	PIC AZ K1 1B	PVFan1B PresCntl	IN WC	0.3	-35	0	0.8	8	0.02	0
14	9	TDIC AZ K12 1B	PVHtr1B TempCntl	DEG F	0.3	0	50	0.1	1	1	0.25
14	10	LP1410	LP1410 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
14	11	LP RCM A14 15	RcmA-14 KpAlive	ENG UNIT	0.3	0	100	0.2	10	0	0
14	12	LP1412	LP1412 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
14	13	LP1413	LP1413 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
14	14	LP1414	LP1414 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
14	15	LP1415	LP1415	ENG UNIT	0.3	0	100	0.2	10	0	0
14	16	LP1416	LP1416 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
14	17	LP1417	LP1417 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
14	18	LP1418	LP1418 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
14	19	LP1419	LP1419 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
14	20	LP1420	LP1420 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
17	1	LP1701	LP1701 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
17	2	LP RCM D17 2	RcmD-17 Loop2	ENG UNIT	0.3	0	100	0.2	10	0	0
17	3	LP RCM D17 3	RcmD-17 Loop3	ENG UNIT	0.3	0	100	0.2	10	0	0
17	4	LP AZ K1WD 1B	PvDmprWD Loop1B	ENG UNIT	0.3	0	100	0.2	10	0	0
17	5	LP RCM D17 15	RcmD-17 KpAlive	ENG UNIT	0.3	0	100	0.2	10	0	0
17	6	LP1706	LP1706 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
17	7	LP1707	LP1707 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
17	8	LP1708	LP1708 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
17	9	LP1709	LP1709 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0

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RCM	Pnt	Tag	Desc	Units	Lscan	Range		Gain	Integral	Deriv	Dead Band
						Lo	Hi		Rep min	Rate	
17	10	LP1710	LP1710 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
17	11	LP1711	LP1711 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
17	12	LP1712	LP1712 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
17	13	LP1713	LP1713 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
17	14	LP1714	LP1714 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
17	15	LP1715	LP1715	ENG UNIT	0.3	0	100	0.2	10	0	0
18	1	LP1801	LP1801 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
18	2	LP RCM D18 2	RcmD-18 Loop2	ENG UNIT	0.3	0	100	0.2	10	0	0
18	3	LP RCM D18 15	RcmD-18 KpAlive	ENG UNIT	0.3	0	100	0.2	10	0	0
18	4	LP1804	LP1804 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
18	5	LP1805	LP1805 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
18	6	LP1806	LP1806 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
18	7	LP1807	LP1807 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
18	8	LP1808	LP1808 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
18	9	LP1809	LP1809 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
18	10	LP1810	LP1810 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
18	11	LP1811	LP1811 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
18	12	LP1812	LP1812 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
18	13	LP1813	LP1813 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
18	14	LP1814	LP1814 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
18	15	LP1815	LP1815	ENG UNIT	0.3	0	100	0.2	10	0	0
20	1	LP2001	LP2001 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
20	2	LP RCM DR20 2A	RcmDr-20 Loop2A	ENG UNIT	0.3	0	100	0.2	10	0	0

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RCM	Pnt	Tag	Desc	Units	Lscan	Range		Gain	Integral	Deriv	Dead Band
						Lo	Hi		Rep min	Rate	
20	3	LP RCM DR20 2B	RcmDr-20 Loop2B	ENG UNIT	0.3	0	100	0.2	10	0	0
20	4	LP AZ K12 1B1	PvHtr1B Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
20	5	LP AZ K1 1B1	PvDmpr1B Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
20	6	LP AZ K1 2B1	PvDmpr2B Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
20	7	LP RCM DR20 15	RcmDr-20KpAlive	ENG UNIT	0.3	0	100	0.2	10	0	0
20	8	LP2008	LP2008 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
20	9	LP2009	LP2009 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
20	10	LP2010	LP2010 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
20	11	LP2011	LP2011 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
20	12	LP2012	LP2012 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
20	13	LP2013	LP2013 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
20	14	LP2014	LP2014 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
20	15	LP2015	LP2015	ENG UNIT	0.3	0	100	0.2	10	0	0
21	1	LP2101	LP2101 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
21	2	LP RCM DR21 2A	RcmDr-21 Loop2A	ENG UNIT	0.3	0	100	0.2	10	0	0
21	3	LP RCM DR21 2B	RcmDr-21 Loop2B	ENG UNIT	0.3	0	100	0.2	10	0	0
21	4	LP 702 K2 8	RmDmpr8 Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
21	5	LP AZ K15 1B1	PvFan1B Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
21	6	LP AZ K1WD 2B	PvDmprWD Loop2B	ENG UNIT	0.3	0	100	0.2	10	0	0
21	7	LP RCM DR21 15	RcmDr-21KpAlive	ENG UNIT	0.3	0	100	0.2	10	0	0
21	8	LP2108	LP2108 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
21	9	LP2109	LP2109 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
21	10	LP2110	LP2110 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0

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RCM	Pnt	Tag	Desc	Units	Lscan	Range		Gain	Integral	Deriv	Dead Band
						Lo	Hi		Rep min	Rate	
21	11	LP2111	LP2111 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
21	12	LP2112	LP2112 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
21	13	LP2113	LP2113 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
21	14	LP2114	LP2114 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
21	15	LP2115	LP2115	ENG UNIT	0.3	0	100	0.2	10	0	0
23	1	LP2301	LP2301 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
23	2	LP U32 23 24	U32-23 Loop24	ENG UNIT	0.3	0	100	0.2	10	0	0
23	3	LP U32 23 28	U32-23 Loop28	ENG UNIT	0.3	0	100	0.2	10	0	0
23	4	LP U32 23 31A	U32-23 Loop31A	ENG UNIT	0.3	0	100	0.2	10	0	0
23	5	LP U32 23 31B	U32-23 Loop31B	ENG UNIT	0.3	0	100	0.2	10	0	0
23	6	LP U32 23 50	U32-23 Loop50	ENG UNIT	0.3	0	100	0.2	10	0	0
23	7	LP U32 23 51	U32-23 Loop51	ENG UNIT	0.1	0	100	0.2	10	0	0
23	8	LP U32 23 52	U32-23 Loop52	ENG UNIT	0.3	0	100	0.2	10	0	0
23	9	LP U32 23 53	U32-23 Loop53	ENG UNIT	0.3	0	100	0.2	10	0	0
23	10	LP U32 23 54A	U32-23 Loop54A	ENG UNIT	0.3	0	100	0.2	10	0	0
23	11	LP U32 23 54B	U32-23 Loop54B	ENG UNIT	0.3	0	100	0.2	10	0	0
23	12	LP AZ1 K4 1M	Az1Macro Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
23	13	LP AZ2 K4 1M	Az2Macro Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
23	14	LP U32 23 34	U32-23 Loop34	ENG UNIT	0.3	0	100	0.2	10	0	0
23	15	LP2315	LP2315 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
23	16	LP2316	LP2316 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
23	17	LP2317	LP2317 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
23	18	LP2318	LP2318 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0

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RCM	Pnt	Tag	Desc	Units	Lscan	Range		Gain	Integral	Deriv	Dead Band
						Lo	Hi		Rep min	Rate	
23	19	LP2319	LP2319 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
23	20	LP2320	LP2320 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
23	21	LP2321	LP2321 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
23	22	LP2322	LP2322 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
23	23	LP2323	LP2323 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
23	24	LP2324	LP2324 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
23	25	LP2325	LP2325 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
24	1	LP2401	LP2401 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
24	2	LP RCM A24 2	RcmA-24 Loop2	ENG UNIT	0.1	0	100	0.2	10	0	0
24	3	KQ AZ CWP 1A	CwPump1ARunTime	ENG UNIT	0.3	0	100	0.2	10	0	0
24	4	KQ AZ CWP 1B	CwPump1BRunTime	ENG UNIT	0.3	0	100	0.2	10	0	0
24	5	FQ AZ CWR 1	CwrHdr Flow	ENG UNIT	0.3	0	100	0.2	10	0	0
24	6	FQ AZ PC 1	SealPot OutFlow	ENG UNIT	0.3	0	100	0.2	10	0	0
24	7	FQ AZ RW 1	RwHdr Flow	ENG UNIT	0.3	0	100	0.2	10	0	0
24	8	LP2408	LP2408 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
24	9	LP2409	LP2409 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
24	10	LP2410	LP2410 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
24	11	LP2411	LP2411 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
24	12	LP2412	LP2412 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
24	13	LP2413	LP2413 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
24	14	LP2414	LP2414 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
24	15	LP2415	LP2415 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
24	16	LP2416	LP2416 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0

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RCM	Pnt	Tag	Desc	Units	Lscan	Range		Gain	Integral	Deriv	Dead Band
						Lo	Hi		Rep min	Rate	
24	17	LP2417	LP2417 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
24	18	LP2418	LP2418 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
24	19	LP2419	LP2419 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
24	20	LP2420	LP2420 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
28	1	LP2801	LP2801 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
28	2	LP RCM D28 2	RcmD-28 Loop2	ENG UNIT	0.3	0	100	0.2	10	0	0
28	3	LP2803	LP2803 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
28	4	LP2804	LP2804 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
28	5	LP2805	LP2805 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
28	6	LP2806	LP2806 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
28	7	LP2807	LP2807 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
28	8	LP2808	LP2808 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
28	9	LP2809	LP2809 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
28	10	LP2810	LP2810 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
28	11	LP2811	LP2811 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
28	12	LP2812	LP2812 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
28	13	LP2813	LP2813 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
28	14	LP2814	LP2814 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
28	15	LP2815	LP2815 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
31	1	LP3101	LP3101 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
31	2	LP RCM DR31 2A	RcmDr-31 Loop2A	ENG UNIT	0.3	0	100	0.2	10	0	0
31	3	LP RCM DR31 2B	RcmDr-31 Loop2B	ENG UNIT	0.3	0	100	0.2	10	0	0
31	4	LP RCM DR31 3	RcmDr-31 Loop3	ENG UNIT	0.3	0	100	0.2	10	0	0

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RCM	Pnt	Tag	Desc	Units	Lscan	Range		Gain	Integral	Deriv	Dead Band
						Lo	Hi		Rep min	Rate	
31	5	LP TMACS 1	Tmacs Loop1	ENG UNIT	0.3	0	100	0.2	10	0	0
31	6	LP TMACS 2	Tmacs Loop2	ENG UNIT	0.3	0	100	0.2	10	0	0
31	7	LP TMACS 3	Tmacs Loop3	ENG UNIT	0.3	0	100	0.2	10	0	0
31	8	LP TMACS 4	Tmacs Loop4	ENG UNIT	0.3	0	100	0.2	10	0	0
31	9	LP AZ CWP 1A	CwPump1A Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
31	10	LP AZ CWP 1B	CwPump1B Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
31	11	LP AZ CWR 1	Chiller Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
31	12	LP3112	LP3112 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
31	13	LP3113	LP3113 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
31	14	LP3114	LP3114 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
31	15	LP3115	LP3115 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
31	16	LP3116	LP3116 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
31	17	LP3117	LP3117 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
31	18	LP3118	LP3118 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
31	19	LP3119	LP3119 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
31	20	LP3120	LP3120 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
34	1	LP3401	LP3401 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
34	2	LP U32 34 35	U32-34 Loop35	ENG UNIT	0.3	0	100	0.2	10	0	0
34	3	LP U32 34 36	U32-34 Loop36	ENG UNIT	0.3	0	100	0.2	10	0	0
34	4	LP U32 34 39	U32-34 Loop39	ENG UNIT	0.3	0	100	0.2	10	0	0
34	5	LP U32 34 40A	U32-34 Loop40A	ENG UNIT	0.3	0	100	0.2	10	0	0
34	6	LP U32 34 40B	U32-34 Loop40B	ENG UNIT	0.3	0	100	0.2	10	0	0
34	7	LP U32 34 45	U32-34 Loop45	ENG UNIT	0.3	0	100	0.2	10	0	0

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RCM	Pnt	Tag	Desc	Units	Lscan	Range		Gain	Integral	Deriv	Dead Band
						Lo	Hi		Rep min	Rate	
34	8	LP U32 34 46	U32-34 Loop46	ENG UNIT	0.3	0	100	0.2	10	0	0
34	9	LP U32 34 47	U32-34 Loop47	ENG UNIT	0.3	0	100	0.2	10	0	0
34	10	LP U32 34 48	U32-34 Loop48	ENG UNIT	0.3	0	100	0.2	10	0	0
34	11	LP U32 34 49A	U32-34 Loop49A	ENG UNIT	0.3	0	100	0.2	10	0	0
34	12	LP U32 34 49B	U32-34 Loop49B	ENG UNIT	0.3	0	100	0.2	10	0	0
34	13	LP 702 K3 1M	K3Macro Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
34	14	LP AY1 K4 1M	Ay1Macro Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
34	15	LP AY2 K4 1M	Ay2Macro Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
34	16	LP U32 34 23	U32-34 Loop23	ENG UNIT	0.3	0	100	0.2	10	0	0
34	17	LP3417	LP3417 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
34	18	LP3418	LP3418 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
34	19	LP3419	LP3419 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
34	20	LP3420	LP3420 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
34	21	LP3421	LP3421 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
34	22	LP3422	LP3422 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
34	23	LP3423	LP3423 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
34	24	LP3424	LP3424 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
34	25	LP3425	LP3425 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
35	1	LP3501	LP3501 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
35	2	LP RCM A35 2	RcmA-35 Loop2	ENG UNIT	0.1	0	100	0.2	10	0	0
35	3	LP RCM A35 3	RcmA-35 Loop3	ENG UNIT	0.3	0	100	0.2	10	0	0
35	4	PDIC 702 K2 2	RCMA 35 LOOP4	WC	0.3	-1	0	1.1	9	0.04	0
35	5	PDIC 702 K2 3	RCMA 35 LOOP5	WC	0.3	-1	0	1.1	9	0.04	0

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RCM	Pnt	Tag	Desc	Units	Lscan	Range		Gain	Integral	Deriv	Dead Band
						Lo	Hi		Rep min	Rate	
35	6	PDI 702 K28 1	RCMA 35 LOOP6	WC	0.3	-1	0	0.2	10	0	0
35	7	PDI 702 K27 1	RCMA 35 LOOP7	WC	0.3	-1	0	0.2	10	0	0
35	8	LP3508	LP3508 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
35	9	LP3509	LP3509 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
35	10	LP3510	LP3510 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
35	11	LP3511	LP3511 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
35	12	LP3512	LP3512 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
35	13	LP3513	LP3513 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
35	14	LP3514	LP3514 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
35	15	LP3515	LP3515 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
36	1	LP3601	LP3601 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
36	2	LP RCM A36 2	RcmA-36 Loop2	ENG UNIT	0.1	0	100	0.2	10	0	0
36	3	LP RCM A36 3	RcmA-36 Loop3	ENG UNIT	0.3	0	100	0.2	10	0	0
36	4	PIC 702 K35 1A	BldFan1APresCntl	IN WC	0.3	-5	2	1.5	10	0.04	0
36	5	PIC 702 K35 1B	BldFan1BPresCntl	IN WC	0.3	-5	2	1.5	10	0.04	0
36	6	FQ 702 K3 1	BvStk MonFlow	ENG UNIT	0.3	0	100	0.2	10	0	0
36	7	FQ 702 K3 2	BvStk RecFlow	ENG UNIT	0.3	0	100	0.2	10	0	0
36	8	FQ 702 K3 3	BvStk Flow	ENG UNIT	0.3	0	100	0.2	10	0	0
36	9	KQ 702 K35 1A	BvFan1A RunTime	ENG UNIT	0.3	0	100	0.2	10	0	0
36	10	KQ 702 K35 1B	BvFan1B RunTime	ENG UNIT	0.3	0	100	0.2	10	0	0
36	11	LP3611	LP3611 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
36	12	LP3612	LP3612 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
36	13	PDIC 702K3 1	VentCellDpCntl	IN WC	0.3	-2	0	0.3	5	0.05	0

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RCM	Pnt	Tag	Desc	Units	Lscan	Range		Gain	Integral	Deriv	Dead Band
						Lo	Hi		Rep min	Rate	
36	14	LP 702 K3 1A	BvFiltr1A Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
36	15	LP 702 K3 1B	BvFiltr1B Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
36	16	LP3616	LP3616 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
36	17	LP3617	LP3617 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
36	18	LP3618	LP3618 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
36	19	LP3619	LP3619 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
36	20	LP3620	LP3620 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
39	1	LP3901	LP3901 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
39	2	LP RCM D39 2	RcmD-39 Loop2	ENG UNIT	0.3	0	100	0.2	10	0	0
39	3	LP3903	LP3903 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
39	4	LP3904	LP3904 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
39	5	LP3905	LP3905 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
39	6	LP3906	LP3906 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
39	7	LP3907	LP3907 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
39	8	LP3908	LP3908 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
39	9	LP3909	LP3909 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
39	10	LP3910	LP3910 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
39	11	LP3911	LP3911 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
39	12	LP3912	LP3912 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
39	13	LP3913	LP3913 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
39	14	LP3914	LP3914 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
39	15	LP3915	LP3915 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
40	1	LP4001	LP4001 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0

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RCM	Pnt	Tag	Desc	Units	Lscan	Range		Gain	Integral	Deriv	Dead Band
						Lo	Hi		Rep min	Rate	
40	2	LP RCM DR40 2A	RcmDr-40 Loop2A	ENG UNIT	0.3	0	100	0.2	10	0	0
40	3	LP RCM DR40 2B	RcmDr-40 Loop2B	ENG UNIT	0.3	0	100	0.2	10	0	0
40	4	LP 702 K26 1	BvAcUnit Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
40	5	LP 702 K35 1A	BvFanA Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
40	6	LP 702 K35 1B	BvFanB Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
40	7	LP 702 K3 2A	BvDmpr2A Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
40	8	LP 702 K3 2B	BvDmpr2B Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
40	9	LP4009	LP4009 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
40	10	LP4010	LP4010 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
40	11	LP4011	LP4011 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
40	12	LP4012	LP4012 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
40	13	LP4013	LP4013 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
40	14	LP4014	LP4014 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
40	15	LP4015	LP4015 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
45	1	LP4501	LP4501 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
45	2	LP RCM F45 2	RcmF-45 Loop2	ENG UNIT	0.1	0	100	0.2	10	0	0
45	3	LP4503	LP4503 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
45	4	LP4504	LP4504 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
45	5	LP4505	LP4505 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
45	6	LP4506	LP4506 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
45	7	LP4507	LP4507 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
45	8	LP4508	LP4508 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
45	9	LP4509	LP4509 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0

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RCM	Pnt	Tag	Desc	Units	Lscan	Range		Gain	Integral	Deriv	Dead Band
						Lo	Hi		Rep min	Rate	
45	10	LP4510	LP4510 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
45	11	LP4511	LP4511 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
45	12	LP4512	LP4512 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
45	13	LP4513	LP4513 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
45	14	LP4514	LP4514 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
45	15	LP4515	LP4515 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
46	1	LP4601	LP4601 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
46	2	LP RCM A46 2	RcmA-46 Loop2	ENG UNIT	0.1	0	100	0.2	10	0	0
46	3	KQ AY1 EWP 1A	EwPump1ARunTime	ENG UNIT	0.3	0	100	0.2	10	0	0
46	4	KQ AY1 EWP 1B	EwPump1BRunTime	ENG UNIT	0.3	0	100	0.2	10	0	0
46	5	FQ AY1 EWR 1	EwrHdr Flow	ENG UNIT	0.3	0	100	0.2	10	0	0
46	6	KQ AY2 EWP 1A	EwPump1ARunTime	ENG UNIT	0.3	0	100	0.2	10	0	0
46	7	KQ AY2 EWP 1B	EwPump1BRunTime	ENG UNIT	0.3	0	100	0.2	10	0	0
46	8	FQ AY2 EWR 1	EwrHdr Flow	ENG UNIT	0.3	0	100	0.2	10	0	0
46	9	KQ AY1 K45 1	RrcrFan RunTime	ENG UNIT	0.3	0	100	0.2	10	0	0
46	10	KQ AY2 K45 1	RrcrFan RunTime	ENG UNIT	0.3	0	100	0.2	10	0	0
46	11	PIC AY1 K1 1	AY1Tank PresCntl	IN WC	0.3	-6	4	0.9	10	0.02	0
46	12	PIC AY2 K1 1	AY2Tank PresCntl	IN WC	0.3	-6	4	0.9	10	0.02	0
46	13	LP4613	LP4613 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
46	14	LP4614	LP4614 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
46	15	LP4615	LP4615 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
46	16	LP4616	LP4616 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
46	17	LP4617	LP4617 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0

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RCM	Pnt	Tag	Desc	Units	Lscan	Range		Gain	Integral	Deriv	Dead Band
						Lo	Hi		Rep min	Rate	
46	18	LP4618	LP4618 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
46	19	LP4619	LP4619 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
46	20	LP4620	LP4620 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
47	1	LP4701	LP4701 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
47	2	LP RCM D47 2	RcmD-47 Loop2	ENG UNIT	0.3	0	100	0.2	10	0	0
47	3	LP RCM D47 3	RcmD-47 Loop3	ENG UNIT	0.3	0	100	0.2	10	0	0
47	4	LP RCM D47 4	RcmD-47 Loop4	ENG UNIT	0.3	0	100	0.2	10	0	0
47	5	LP AY1 K1 1	TkInFltr Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
47	6	LP4706	LP4706 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
47	7	LP4707	LP4707 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
47	8	LP4708	LP4708 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
47	9	LP4709	LP4709 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
47	10	LP4710	LP4710 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
47	11	LP4711	LP4711 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
47	12	LP4712	LP4712 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
47	13	LP4713	LP4713 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
47	14	LP4714	LP4714 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
47	15	LP4715	LP4715 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
48	1	LP4801	LP4801 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
48	2	LP RCM D48 2	RcmD-48 Loop2	ENG UNIT	0.3	0	100	0.2	10	0	0
48	3	LP RCM D48 3	RcmD-48 Loop3	ENG UNIT	0.3	0	100	0.2	10	0	0
48	4	LP RCM D48 4	RcmD-48 Loop4	ENG UNIT	0.3	0	100	0.2	10	0	0
48	5	LP AY2 K1 1	TkInFltr Loop	ENG UNIT	0.3	0	100	0.2	10	0	0

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RCM	Pnt	Tag	Desc	Units	Lscan	Range		Gain	Integral	Deriv	Dead Band
						Lo	Hi		Rep_min	Rate	
48	6	LP4806	LP4806 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
48	7	LP4807	LP4807 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
48	8	LP4808	LP4808 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
48	9	LP4809	LP4809 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
48	10	LP4810	LP4810 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
48	11	LP4811	LP4811 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
48	12	LP4812	LP4812 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
48	13	LP4813	LP4813 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
48	14	LP4814	LP4814 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
48	15	LP4815	LP4815 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
49	1	LP4901	LP4901 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
49	2	LP RCM DR49 2A	RcmDr-49 Loop2A	ENG UNIT	0.3	0	100	0.2	10	0	0
49	3	LP RCM DR49 2B	RcmDr-49 Loop2B	ENG UNIT	0.3	0	100	0.2	10	0	0
49	4	LP AY1 EWP 1A	EwPump1A Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
49	5	LP AY1 EWP 1B	EwPump1B Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
49	6	LP AY1 EWSP 1	EwSpyPmp Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
49	7	LP AY1 EWT 1	EwTower Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
49	8	LP AY1 K45 1	RrcrFan Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
49	9	LP AY2 EWP 1A	EwPump1A Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
49	10	LP AY2 EWP 1B	EwPump1B Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
49	11	LP AY2 EWSP 1	EwSpyPmp Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
49	12	LP AY2 EWT 1	EwTower Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
49	13	LP AY2 K45 1	RrcrFan Loop	ENG UNIT	0.3	0	100	0.2	10	0	0

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RCM	Pnt	Tag	Desc	Units	Lscan	Range		Gain	Integral	Deriv	Dead
						Lo	Hi		Rep_min		
49	14	LP RCMDR49 14	FanOutput Status	ENG UNIT	0.3	0	100	0.2	10	0	0
49	15	LP4915	LP4915 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
49	16	LP4916	LP4916 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
49	17	LP4917	LP4917 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
49	18	LP4918	LP4918 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
49	19	LP4919	LP4919 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
49	20	LP4920	LP4920 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
50	1	LP5001	LP5001 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
50	2	LP RCM F50 2	RcmF-50 Loop2	ENG UNIT	0.1	0	100	0.2	10	0	0
50	3	LP5003	LP5003 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
50	4	LP5004	LP5004 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
50	5	LP5005	LP5005 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
50	6	LP5006	LP5006 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
50	7	LP5007	LP5007 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
50	8	LP5008	LP5008 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
50	9	LP5009	LP5009 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
50	10	LP5010	LP5010 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
50	11	LP5011	LP5011 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
50	12	LP5012	LP5012 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
50	13	LP5013	LP5013 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
50	14	LP5014	LP5014 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
50	15	LP5015	LP5015 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
51	1	LP5101	LP5101 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0

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RCM	Pnt	Tag	Desc	Units	Lscan	Range		Gain	Integral	Deriv	Dead Band
						Lo	Hi		Rep min	Rate	
51	2	LP RCM A51 2	RcmA-51 Loop2	ENG UNIT	0.1	0	100	0.2	10	0	0
51	3	KQ AZ1 EWP 1A	EwPump1ARunTime	ENG UNIT	0.3	0	100	0.2	10	0	0
51	4	KQ AZ1 EWP 1B	EwPump1BRunTime	ENG UNIT	0.3	0	100	0.2	10	0	0
51	5	FQ AZ1 EWR 1	EwrHdr Flow	ENG UNIT	0.3	0	100	0.2	10	0	0
51	6	KQ AZ2 EWP 1A	EwPump1ARunTime	ENG UNIT	0.3	0	100	0.2	10	0	0
51	7	KQ AZ2 EWP 1B	EwPump1BRunTime	ENG UNIT	0.3	0	100	0.2	10	0	0
51	8	FQ AZ2 EWR 1	CwrHdr Flow	ENG UNIT	0.3	0	100	0.2	10	0	0
51	9	KQ AZ1 K45 1	RrcrFan RunTime	ENG UNIT	0.3	0	100	0.2	10	0	0
51	10	KQ AZ2 K45 1	RrcrFan RunTime	ENG UNIT	0.3	0	100	0.2	10	0	0
51	11	PIC AZ1 K1 1	AZ1Tank PresCntl	IN WC	0.3	-6	4	0.9	10	0.02	0
51	12	PIC AZ2 K1 1	AZ2Tank PresCntl	IN WC	0.3	-6	4	0.9	10	0.02	0
51	13	LP5113	LP5113 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
51	14	LP5114	LP5114 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
51	15	LP5115	LP5115 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
51	16	LP5116	LP5116 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
51	17	LP5117	LP5117 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
51	18	LP5118	LP5118 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
51	19	LP5119	LP5119 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
51	20	LP5120	LP5120 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
52	1	LP5201	LP5201 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
52	2	LP RCM D52 2	RcmD-52 Loop2	ENG UNIT	0.3	0	100	0.2	10	0	0
52	3	LP RCM D52 3	RcmD-52 Loop3	ENG UNIT	0.3	0	100	0.2	10	0	0
52	4	LP RCM D52 4	RcmD-52 Loop4	ENG UNIT	0.3	0	100	0.2	10	0	0

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RCM	Pnt	Tag	Desc	Units	Lscan	Range		Gain	Integral	Deriv	Dead Band
						Lo	Hi		Rep min	Rate	
52	5	LP AZ1 K1 1	TkInFiltr Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
52	6	LP5206	LP5206 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
52	7	LP5207	LP5207 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
52	8	LP5208	LP5208 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
52	9	LP5209	LP5209 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
52	10	LP5210	LP5210 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
52	11	LP5211	LP5211 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
52	12	LP5212	LP5212 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
52	13	LP5213	LP5213 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
52	14	LP5214	LP5214 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
52	15	LP5215	LP5215 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
53	1	LP5301	LP5301 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
53	2	LP RCM D53 2	RcmD-53 Loop2	ENG UNIT	0.3	0	100	0.2	10	0	0
53	3	LP RCM D53 3	RcmD-53 Loop3	ENG UNIT	0.3	0	100	0.2	10	0	0
53	4	LP RCM D53 4	RcmD-53 Loop4	ENG UNIT	0.3	0	100	0.2	10	0	0
53	5	LP AZ2 K1 1	TkInFiltr Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
53	6	LP5306	LP5306 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
53	7	LP5307	LP5307 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
53	8	LP5308	LP5308 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
53	9	LP5309	LP5309 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
53	10	LP5310	LP5310 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
53	11	LP5311	LP5311 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
53	12	LP5312	LP5312 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0

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RCM	Pnt	Tag	Desc	Units	Lscan	Range		Gain	Integral	Deriv	Dead Band
						Lo	Hi		Rep min	Rate	
53	13	LP5313	LP5313 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
53	14	LP5314	LP5314 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
53	15	LP5315	LP5315 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
54	1	LP5401	LP5401 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
54	2	LP RCM DR54 2A	RcmDr-54 Loop2A	ENG UNIT	0.3	0	100	0.2	10	0	0
54	3	LP RCM DR54 2B	RcmDr-54 Loop2B	ENG UNIT	0.3	0	100	0.2	10	0	0
54	4	LP AZ1 EWP 1A	EwPump1A Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
54	5	LP AZ1 EWP 1B	EwPump1B Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
54	6	LP AZ1 EWSP 1	EwSpyPmp Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
54	7	LP AZ1 EWT 1	EwTower Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
54	8	LP AZ1 K45 1	RrcrFan Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
54	9	LP AZ2 EWP 1A	EwPump1A Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
54	10	LP AZ2 EWP 1B	EwPump1B Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
54	11	LP AZ2 EWSP 1	EwSpyPmp Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
54	12	LP AZ2 EWT 1	EwTower Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
54	13	LP AZ2 K45 1	RrcrFan Loop	ENG UNIT	0.3	0	100	0.2	10	0	0
54	14	LP5414	LP5414 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
54	15	LP5415	LP5415 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
54	16	LP5416	LP5416 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
54	17	LP5417	LP5417 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
54	18	LP5418	LP5418 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
54	19	LP5419	LP5419 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0
54	20	LP5420	LP5420 DESCRIPTION	ENG UNIT	0.3	0	100	0.2	10	0	0

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ATTACHMENT G
MICON AUTOMATION SYTEM
VIRTUAL DISCRETES

Table Field Descriptors

RCM		An integer value identifying the Micon Remote Controller Module
Pnt		An integer value identifying the Point number of the Controller
Tag Name		A character string identifying the variable name
Description		A character string describing the variable
Hist	scan	Data historian scan rate -- a floating point number
	def	Data historian definition - an integer value
Acc		
Alarm	p	Alarm priority - integer value ¹
	lo	Alarm when this tag is a 0 (false state) - a boolean value
	hi	Alarm when this tag is a 1 (true state) - a boolean value
Color	lo	Tag state 0 color when not in alarm
	hi	Tag state 1 color when not in alarm
Description	low	Tag state 0 descriptor -- character string
	hi	Tag state 1 descriptor -- character string

¹ 0=normal "Dim grey", 1=urgent "Red", 2=caution "Yellow", 3=information "White".
² 0=Black, 1=Red, 2=Green, 3=Yellow, 4=Blue, 5=Magenta, 6=Cyan, 7=White, 8=Dim Grey, 9=Wheat, 10=Pink, 11=Lt. Green, 12=Lt. Blue, 13=Brown, 14=Aqua, 15=Orchid.

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RCM	Pnt	Tag		Desc	Historian			Alarm			Color		Description	
					scan	def	Acc	pri	lo	hi	lo	hi	lo	hi
1	1	I	AZ K15 1A	PVFan1ACurrent	0	0	0	4	0	0	4	7	FALSE	TRUE
1	2	M	AZ K12 1AA	PVHtr1A MudDi2	0	0	0	4	0	0	4	7	FALSE	TRUE
1	3	M	AZ K12 1AB	PVHtr1A MudDi4	0	0	0	4	0	0	4	7	FALSE	TRUE
1	4	M	AZ K12 1AC	PVHtr1A MudDi8	0	0	0	4	0	0	4	7	FALSE	TRUE
1	7	M	AZ K12 1BA	PVHtr1B MudDi2	0	0	0	4	0	0	4	7	FALSE	TRUE
1	8	M	AZ K12 1BB	PVHtr1B MudDi4	0	0	0	4	0	0	4	7	FALSE	TRUE
1	9	M	AZ K12 1BC	PVHtr1B MudDi8	0	0	0	4	0	0	4	7	FALSE	TRUE
1	10	M	AZ K15 1AA	PVFan1B MudDi1	0	0	0	4	0	0	4	7	FALSE	TRUE
1	11	M	AZ K15 1AB	PVFan1B MudDi2	0	0	0	4	0	0	4	7	FALSE	TRUE
1	12	M	AZ K15 1AC	PVFan1B MudDi4	0	0	0	4	0	0	4	7	FALSE	TRUE
1	13	M	AZ K15 1AD	PVFan1B MudDi8	0	0	0	4	0	0	4	7	FALSE	TRUE
1	14	M	AZ K15 1BA	PVFan1A MudDi1	0	0	0	4	0	0	4	7	FALSE	TRUE
1	15	M	AZ K15 1BB	PVFan1A MudDi2	0	0	0	4	0	0	4	7	FALSE	TRUE
1	16	M	AZ K15 1BC	PVFan1A MudDi4	0	0	0	4	0	0	4	7	FALSE	TRUE
1	17	M	AZ K15 1BD	PVFan1A MudDi8	0	0	0	4	0	0	4	7	FALSE	TRUE
1	18	M	AZ K18 1A	PVCdsr MudDi1	0	0	0	4	0	0	4	7	FALSE	TRUE
1	19	M	AZ K18 1B	PVCdsr MudDi2	0	0	0	4	0	0	4	7	FALSE	TRUE
1	20	M	AZ K18 1C	PvCdsr MudDi4	0	0	0	4	0	0	4	7	FALSE	TRUE
1	21	M	AZ K18 1D	PvCdsr MudDi8	0	0	0	4	0	0	4	7	FALSE	TRUE
1	22	VMK	AZ K1 1AA	PvDmpr1AOpen	0	0	0	4	0	0	4	7	FALSE	TRUE
1	23	VMK	AZ K1 1AB	PvDmpr1AClose	0	0	0	4	0	0	4	7	FALSE	TRUE
1	24	VMK	AZ K1 2AA	PvDmpr2AOpen	0	0	0	4	0	0	4	7	FALSE	TRUE
1	25	VMK	AZ K1 2AB	PvDmpr2AClose	0	0	0	4	0	0	4	7	FALSE	TRUE

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RCM	Pnt	Tag		Desc	Historian			Alarm			Color		Description	
					scan	def	Acc	pri	lo	hi	lo	hi	lo	hi
1	26	V	AZ K12 1AA	PvHtr1A On	0	0	0	4	0	0	4	7	FALSE	TRUE
1	27	V	AZ K12 1AB	PvHtr1A Off	0	0	0	4	0	0	4	7	FALSE	TRUE
1	28	V	AZ K15 1AA	PvFan1A Start	0	0	0	4	0	0	4	7	FALSE	TRUE
1	29	V	AZ K15 1AB	PvFan1A Stop	0	0	0	4	0	0	4	7	FALSE	TRUE
1	30	XA	RCM A2 1	Rcm-A2 KAStatus	0	0	0	1	1	0	1	2	OFF LINE	ON LINE
1	31	XA	RCM A3 1	Rcm-A3 KAStatus	0	0	0	1	1	0	1	2	OFF LINE	ON LINE
1	32	XA	RCM D6 1	Rcm-D6 KAStatus	0	0	0	1	1	0	1	2	OFF LINE	ON LINE
1	33	XA	RCM D7 1	Rcm-D7 KAStatus	0	0	0	1	1	0	1	2	OFF LINE	ON LINE
1	34	XA	RCM DR10 1	Rcm-Dr10KAStatus	0	0	0	1	1	0	1	2	OFF LINE	ON LINE
1	35	XA	RCM DR9 1	Rcm-Dr9 KAStatus	0	0	0	1	1	0	1	2	OFF LINE	ON LINE
1	36	XA	U32 1 1	U32-1 KAStatus	0	0	0	1	1	0	1	2	OFF LINE	ON LINE
1	37	YA	AZ K12 1A	PVHtr1A Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
1	38	YA	AZ K12 1AA	PVHtr1A StdbYSts	0	0	0	2	0	1	2	3	NORMAL	NO STDBY
1	39	YA	AZ K15 1A	PVFan1A Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
1	40	YA	AZ K15 1AA	PVFan1A StdbYSts	0	0	0	2	0	1	2	3	NORMAL	NO STDBY
1	41	YA	AZ K1 1AR	PVRstr1AFail	0	0	0	2	0	1	2	3	NORMAL	FAULT
1	42	YA	AZ K1 1M	PVMacro Status	0	0	0	3	0	1	2	7	NORMAL	FAULT
1	43	YA	RCM A2 1	RcmA2 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
1	44	YA	RCM A3 1	RcmA3 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
1	45	YA	RCM D6 1	RcmD6 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
1	46	YA	RCM D7 1	RcmD7 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
1	47	YA	RCM DR9 1	RcmDr9 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
1	49	YT	U32 1 10	RcmDr9 FBusVer	0	0	0	4	0	0	4	7	FALSE	TRUE

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RCM	Pnt	Tag	Desc	Historian		Acc	Alarm			Color		Description	
				scan	def		pri	lo	hi	lo	hi	lo	hi
1	50	YT U32 1 9	RcmDr9 FBusVer	0	0	0	4	0	0	4	7	FALSE	TRUE
1	51	Y AZ K12 1AA	PvHtr1A Interlok	0	0	0	4	0	0	4	7	FALSE	TRUE
1	52	Y AZ K12 1AB	PvRstrtB OnCmd	0	0	0	4	0	0	4	7	INACTIVE	ON
1	53	Y AZ K12 1AC	PvHtr1A XfrCmd	0	0	0	4	0	0	4	7	INACTIVE	TRANSFER
1	54	Y AZ K15 1AA	PvFan1A Interlok	0	0	0	4	0	0	4	7	FALSE	TRUE
1	55	Y AZ K15 1AC	PvFan1A XfrCmd	0	0	0	4	0	0	4	7	INACTIVE	TRANSFER
1	56	Y AZ K1 1AA	PvDmpr1AInterlok	0	0	0	4	0	0	4	7	FALSE	TRUE
1	57	Y AZ K1 2AA	PvDmpr2AInterlok	0	0	0	4	0	0	4	7	FALSE	TRUE
1	58	Y AZ K1 2AB	PvDmpr2AAutoOvrd	0	0	0	4	0	0	4	7	FALSE	TRUE
1	59	Y AZ K1 2AC	PvDmpr2AIllokCall	0	0	0	4	0	0	4	7	FALSE	TRUE
1	60	Y AZ K1 2AD	PvDmpr2AIllokTrip	0	0	0	4	0	0	4	7	FALSE	TRUE
1	61	ZA AZ K1 1A	PvDmpr1AStatus	0	0	0	2	0	1	2	3	NORMAL	FAULT
1	62	ZA AZ K1 2A	PvDmpr2AStatus	0	0	0	2	0	1	2	3	NORMAL	FAULT
1	63	YT U32 1 1	U32 1 FBusVer	0	0	0	4	0	0	4	7	FALSE	TRUE
1	64	YA U32 12 1	U32 12 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
1	65	YA RCM DR10 1	RcmDr10 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
1	66	M AZ K1 1AA	FLTRBK1A MUDDI1	0	0	0	0	0	0	4	7	FALSE	TRUE
1	67	M AZ K1 1AB	FLTRBK1A MUDDI2	0	0	0	0	0	0	4	7	FALSE	TRUE
1	68	YS AZ K12 1A2	PVHtr1A OnCmd	0	0	0	0	0	0	4	7	OFF	ON
1	69	YS AZ K15 1A2	PVFan1A OnCmd	0	0	0	0	0	0	4	7	OFF	ON
1	70	QA U32 1 1	H FLG U32 1	0	0	0	0	0	0	7	8	ON	OFF
2	1	YT RCM A2 1	RcmA2 FBusVer	0	0	0	0	0	0	4	7	FALSE	TRUE
2	2	Z AZ1 K1 1	TkVent DmprLnUp	0	0	0	0	0	0	4	7	FALSE	TRUE

RCM	Pnt	Tag	Desc	Historian			Alarm			Color			Description	
				scan	def	Acc	pri	lo	hi	lo	hi	lo	hi	hi
2	3	Z AZ2 K1 1	TKVent DmprLnUp	0	0	0	0	0	0	4	7	FALSE	TRUE	TRUE
2	4	QA RCMA 2 1	H FLG RCMA 2	0	0	0	0	0	0	7	8	ON	OFF	OFF
3	1	PDSH AZ K1 1A	PvFlr1ADpHiHi	0	0	0	0	0	0	1	2	HIHI	NORMAL	NORMAL
3	2	YT RCM A3 1	RcmA3 FBusVer	0	0	0	0	0	0	4	7	FALSE	TRUE	TRUE
3	3	SS AZ K15 1A	PvFan1A OnSpeed	0	0	0	0	0	0	4	7	OFF	ON	ON
3	4	YS AZ K15 1A3	PvFan1A PIDReady	0	0	0	0	0	0	4	7	NT READY	READY	READY
3	5	YS AZ K12 1A3	PvHtr1A PIDReady	0	0	0	0	0	0	4	7	NT READY	READY	READY
3	6	PDSH AZ K1 1A1	PvFlr1ADpHi	0	0	0	0	0	0	3	2	HI	NORMAL	NORMAL
3	7	PDSH AZ K1 1A2	PvFlr1ADpXfer	0	0	0	0	0	0	3	2	XFER	NORMAL	NORMAL
3	8	TDAL AZ K12 1A	PvHtr1A TmpDiffLo	0	0	0	2	0	1	2	3	NORMAL	LOW	LOW
3	9	QA RCMA 3 1	H FLG RCMA 3	0	0	0	0	0	0	7	8	ON	OFF	OFF
6	1	YT RCM D6 1	RcmD6 FBusVer	0	0	0	0	0	0	4	7	FALSE	TRUE	TRUE
6	2	ZA AZ K15 1A	PvFan1A DmprLnUp	0	0	0	2	0	1	2	3	NORMAL	FAULT	FAULT
6	3	ZA AZ K18 1A	PVCdsrInDmprSts	0	0	0	3	0	1	2	7	NORMAL	FAULT	FAULT
6	4	ZA AZ K18 1B	PVCdsrOtDmprSts	0	0	0	3	0	1	2	7	NORMAL	FAULT	FAULT
6	5	ZA AZ K18 1C	PVCdsrByDmprSts	0	0	0	3	0	1	2	7	NORMAL	FAULT	FAULT
6	6	ZS AZ K15 1A	PvFan1A DmprLnUp	0	0	0	0	0	0	4	7	NOT LNUP	LINED UP	LINED UP
6	7	Z AZ K18 1	PvCdsr DmprLnUp	0	0	0	0	0	0	4	7	NOT LNUP	LINED UP	LINED UP
6	8	QA RCM												
7	1	YT RCM D7 1	RcmD7 FBusVer	0	0	0	0	0	0	4	7	FALSE	TRUE	TRUE
7	2	M AZ EPR 3A	StdbyPwrMudDi1	0	0	0	0	0	0	4	7	FALSE	TRUE	TRUE
7	3	M AZ EPR 3B	StdbyPwrMudDi2	0	0	0	0	0	0	4	7	FALSE	TRUE	TRUE
7	4	M AZ EPR 3C	StdbyPwrMudDi8	0	0	0	0	0	0	4	7	FALSE	TRUE	TRUE

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RCM	Pnt	Tag	Desc	Historian			Alarm			Color		Description	
				scan	def	Acc	pri	lo	hi	lo	hi	lo	hi
7	5	YA AZ EPR 1	XferSw1 Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
7	6	YA AZ EPR 2	XferSw2 Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
7	11	XS RCM A2 1	Rcm-A2 Status	0	0	0	0	0	0	4	7	FALSE	TRUE
7	12	XS RCM A3 1	Rcm-A3 Status	0	0	0	0	0	0	4	7	FALSE	TRUE
7	13	XS RCM D6 1	Rcm-D6 Status	0	0	0	0	0	0	4	7	FALSE	TRUE
7	14	XS RCM DR9 1	Rcm-Dr9 Status	0	0	0	0	0	0	4	7	FALSE	TRUE
7	15	XS RCM DR10 1	Rcm-Dr10Status	0	0	0	0	0	0	4	7	FALSE	TRUE
9	1	YA U32 1 9	RcmDr9 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
9	2	YT RCM DR9 1	RcmDr10 FBusVer	0	0	0	0	0	0	4	7	FALSE	TRUE
9	16	XS RCM D7 1	RCM D7 Status	0	0	0	0	0	0	4	7	FALSE	TRUE
10	1	YA U32 1 10	RcmDr10 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
10	2	YT RCM DR10 1	RcmDr10 FBusVer	0	0	0	0	0	0	4	7	FALSE	TRUE
10	3	Y 702 K2 6	RmDmpr6s Interlok	0	0	0	0	0	0	4	7	FALSE	TRUE
10	4	Y 702 K2 7	RmDmpr7s Interlok	0	0	0	0	0	0	4	7	FALSE	TRUE
10	5	ZA 702 K2 6A	RmDmpr6A Status	0	0	0	3	0	1	2	7	NORMAL	FAULT
10	6	ZA 702 K2 6B	RmDmpr6B Status	0	0	0	3	0	1	2	7	NORMAL	FAULT
10	7	ZA 702 K2 7A	RmDmpr7A Status	0	0	0	3	0	1	2	7	NORMAL	FAULT
10	8	ZA 702 K2 7B	RmDmpr7B Status	0	0	0	3	0	1	2	7	NORMAL	FAULT
10	21	XS RCM D7 2	RCM D7 Status	0	0	0	0	0	0	4	7	FALSE	TRUE
12	1	I AZ K15 1B	PVFan1B Current	0	0	0	0	0	0	4	7	FALSE	TRUE
12	4	VMK AZ K1 1BA	PVDmpr1BOpen	0	0	0	0	0	0	4	7	FALSE	TRUE
12	5	VMK AZ K1 1BB	PVDmpr1BClose	0	0	0	0	0	0	4	7	FALSE	TRUE
12	6	VMK AZ K1 2BA	PVDmpr2BOpen	0	0	0	0	0	0	4	7	FALSE	TRUE

RCM	Pnt	Tag	Desc	Historian		Alarm			Color		Description		
				scan	def	Acc	pri	lo	hi	lo	hi	lo	hi
12	7	VMK AZ K1 2BB	PVDmpr2BClose	0	0	0	0	0	0	4	7	FALSE	TRUE
12	8	V AZ K12 1BA	PVHtr1B On	0	0	0	0	0	0	4	7	FALSE	TRUE
12	9	V AZ K12 1BB	PVHtr1B Off	0	0	0	0	0	0	4	7	FALSE	TRUE
12	10	V AZ K15 1BA	PVFan1B Start	0	0	0	0	0	0	4	7	FALSE	TRUE
12	11	V AZ K15 1BB	PVFan1B Stop	0	0	0	0	0	0	4	7	FALSE	TRUE
12	12	XA RCM A13 1	Rcm-A13 KASatus	0	0	0	1	1	0	1	2	OFF LINE	ON LINE
12	13	XA RCM A14 1	Rcm-A14 KASatus	0	0	0	1	1	0	1	2	OFF LINE	ON LINE
12	14	XA RCM D17 1	Rcm-D17 KASatus	0	0	0	1	1	0	1	2	OFF LINE	ON LINE
12	15	XA RCM D18 1	Rcm-D18 KASatus	0	0	0	1	1	0	1	2	OFF LINE	ON LINE
12	16	XA RCM DR20 1	Rcm-Dr20KASatus	0	0	0	1	1	0	1	2	OFF LINE	ON LINE
12	17	XA RCM DR21 1	Rcm-Dr21KASatus	0	0	0	1	1	0	1	2	OFF LINE	ON LINE
12	18	XA U32 12 1	U32-12 KASatus	0	0	0	1	1	0	1	2	OFF LINE	ON LINE
12	19	YA AZ K12 1B	PvHtr1B Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
12	20	YA AZ K12 1BA	PvHtr1B StdbysSts	0	0	0	2	0	1	2	3	NORMAL	NO STDBY
12	21	YA AZ K15 1B	PvFan1B Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
12	22	YA AZ K15 1BA	PvFan1B StdbysSts	0	0	0	2	0	1	2	3	NORMAL	NO STDBY
12	23	YA AZ K1 1BR	PvRstrtBFail	0	0	0	2	0	1	2	3	NORMAL	FAULT
12	24	YA RCM A13 1	RcmA13 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
12	25	YA RCM A14 1	RcmA14 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
12	26	YA RCM D17 1	RcmD17 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
12	27	YA RCM D18 1	RcmD18 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
12	28	YA RCM DR20 1	RcmDr20 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
12	29	YA RCM DR21 1	RcmDr21 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT

RCM	Pnt	Tag	Desc	scan	def	Acc	Alarm				Color				Description	
							pri	lo	hi	lo	hi	lo	hi	lo	hi	
12	32	YT U32	12 20	Rcmdr20 FBusVer	0	0	0	0	0	0	0	4	7	FALSE	TRUE	
12	33	Y AZ	K12 1BA	PvHtr1B Interlok	0	0	0	0	0	0	0	4	7	FALSE	TRUE	
12	34	Y AZ	K12 1BB	PvHtr1B OnCmd	0	0	0	0	0	0	0	4	7	INACTIVE	ON	
12	35	Y AZ	K12 1BC	PvHtr1B XtrCmd	0	0	0	0	0	0	0	4	7	INACTIVE	TRANSFER	
12	36	Y AZ	K15 1BA	PvFan1B Interlok	0	0	0	0	0	0	0	4	7	FALSE	TRUE	
12	37	Y AZ	K15 1BC	PvFan1B XtrCmd	0	0	0	0	0	0	0	4	7	INACTIVE	TRANSFER	
12	38	Y AZ	K1 1BA	PvDmpr1B Interlok	0	0	0	0	0	0	0	4	7	FALSE	TRUE	
12	39	Y AZ	K1 2BA	PvDmpr2B Interlok	0	0	0	0	0	0	0	4	7	FALSE	TRUE	
12	40	Y AZ	K1 2BB	PvDmpr2B AutoOvrd	0	0	0	0	0	0	0	4	7	FALSE	TRUE	
12	41	Y AZ	K1 2BC	PvDmpr2B IllokCall	0	0	0	0	0	0	0	4	7	FALSE	TRUE	
12	42	Y AZ	K1 2BD	PvDmpr2B IllokTrip	0	0	0	0	0	0	0	4	7	FALSE	TRUE	
12	43	ZA AZ	K1 1B	PvDmpr1B Status	0	0	0	0	2	0	1	2	3	NORMAL	FAULT	
12	44	ZA AZ	K1 2B	PvDmpr2B Status	0	0	0	0	2	0	1	2	3	NORMAL	FAULT	
12	45	YT U32	12 1	U32 12 FBusVer	0	0	0	0	0	0	0	4	7	FALSE	TRUE	
12	46	YA U32	1 1	U32 1 CommFail	0	0	0	0	1	0	1	2	1	NORMAL	FAULT	
12	47	M AZ	K1 1BA	FLTRBK1B MUDD11	0	0	0	0	0	0	0	4	7	FALSE	TRUE	
12	48	M AZ	K1 1BB	FLTRBK1B MUDD12	0	0	0	0	0	0	0	4	7	FALSE	TRUE	
12	50	YT U32	12 21	Rcmdr21 FBusVer	0	0	0	0	0	0	0	4	7	FALSE	TRUE	
12	68	YS AZ	K12 1B2	PvHtr1B OnCmd	0	0	0	0	0	0	0	4	7	OFF	ON	
12	69	YS AZ	K15 1B2	PvFan1B OnCmd	0	0	0	0	0	0	0	4	7	OFF	ON	
12	71	YA AZ	K1 1R	PvRsrtr Status	0	0	0	0	2	0	1	2	3	INACTIVE	EXECUTE	
13	1	YT RCM	A13 1	RcmA13 FBusVer	0	0	0	0	0	0	0	4	7	FALSE	TRUE	
13	2	Z AY1	K1 1	AY1Vent DmprLnUp	0	0	0	0	0	0	0	4	7	OFF	VENTING	

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RCM	Pnt	Tag	Desc	Historian			Alarm			Color		Description	
				scan	def	Acc	pri	lo	hi	lo	hi	lo	hi
13	3	Z AY2 K1 1	AY2Vent DmprLnUp	0	0	0	0	0	0	4	7	OFF	VENTING
14	1	PDSH AZ K1 1B	PvFltr1BDpHiHi	0	0	0	0	0	0	1	2	HIHI	NORMAL
14	2	YT RCM A14 1	RcmA14 FBusVer	0	0	0	0	0	0	4	7	FALSE	TRUE
14	3	SS AZ K15 1B	PVFan1B OnSpeed	0	0	0	0	0	0	4	7	OFF	ON
14	4	YS AZ K15 1B3	PVFan1B PIDReady	0	0	0	0	0	0	4	7	NT READY	READY
14	5	YS AZ K12 1B3	PVHtr1B PIDReady	0	0	0	0	0	0	4	7	NT READY	READY
14	6	PDSH AZ K1 1B1	PvFltr1BDpHi	0	0	0	0	0	0	3	2	HI	NORMAL
14	7	PDSH AZ K1 1B2	PvFltr1BDpXfer	0	0	0	0	0	0	3	2	XFER	NORMAL
14	8	TDAL AZ K12 1B	PvHtr1B TmpDifLo	0	0	0	2	0	1	2	3	NORMAL	LOW
17	1	M AZ K19 1A	Heme MudDi1	0	0	0	0	0	0	4	7	FALSE	TRUE
17	2	M AZ K19 1B	Heme MudDi2	0	0	0	0	0	0	4	7	FALSE	TRUE
17	3	YT RCM D17 1	RcmD17 FBusVer	0	0	0	0	0	0	4	7	FALSE	TRUE
17	4	ZA AZ K15 1B	PVFan1B DmprLnUp	0	0	0	2	0	1	2	3	NORMAL	FAULT
17	5	ZA AZ K19 1A	PVHemeInDmprSts	0	0	0	3	0	1	2	7	NORMAL	FAULT
17	6	ZA AZ K19 1B	PVHemeOtDmprSts	0	0	0	3	0	1	2	7	NORMAL	FAULT
17	7	ZA AZ K19 1C	PVHemeByDmprSts	0	0	0	3	0	1	2	7	NORMAL	FAULT
17	8	ZS AZ K15 1B	PVFan1B DmprLnUp	0	0	0	0	0	0	4	7	NOT LNUP	LINED UP
17	9	Z AZ K19 1	PVHeme DmprLnUp	0	0	0	0	0	0	4	7	NOT LNUP	LINED UP
18	1	YT RCM D18 1	RcmD18 FBusVer	0	0	0	0	0	0	4	7	FALSE	TRUE
18	11	XS RCM A13 1	Rcm-A13 Status	0	0	0	0	0	0	4	7	FALSE	TRUE
18	12	XS RCM A14 1	Rcm-A14 Status	0	0	0	0	0	0	4	7	FALSE	TRUE
18	13	XS RCM D17 1	Rcm-D17 Status	0	0	0	0	0	0	4	7	FALSE	TRUE
18	14	XS RCM DR20 1	Rcm-Dr2 Status	0	0	0	0	0	0	4	7	FALSE	TRUE

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RCM	Pnt	Tag	Desc	Historian			Alarm			Color		Description	
				scan	def	Acc	pri	lo	hi	lo	hi	lo	hi
18	15	XS RCM DR21 1	Rcm-Dr21Status	0	0	0	0	0	0	4	7	FALSE	TRUE
20	1	YA U32 12 20	RcmDr20 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
20	3	YT RCM DR20 1	RcmDr20 FBusVer	0	0	0	0	0	0	7	7	FALSE	TRUE
20	11	XS RCM D18 1	RCMD18 STATUS	0	0	0	0	0	0	4	7	FALSE	TRUE
21	1	YA U32 12 21	RcmDr21 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
21	2	YT RCM DR21 1	RcmDr21 FBusVer	0	0	0	4	0	0	4	7	FALSE	TRUE
21	3	Y 702 K2 8	RmDmpr8sInterlok	0	0	0	0	0	0	4	7	FALSE	TRUE
21	4	ZA 702 K2 8A	RmDmpr8AStatus	0	0	0	3	0	1	2	7	NORMAL	FAULT
21	5	ZA 702 K2 8B	RmDmpr8BStatus	0	0	0	3	0	1	2	7	NORMAL	FAULT
21	16	XS RCM D18 2	RCMD18 STATUS	0	0	0	0	0	0	4	7	FALSE	TRUE
23	1	M AZ1 K4 1A	TkStat1 MudDi1	0	0	0	0	0	0	4	7	FALSE	TRUE
23	2	M AZ1 K4 1B	TkStat1 MudDi2	0	0	0	0	0	0	4	7	FALSE	TRUE
23	3	M AZ1 K4 1C	TkStat1 MudDi4	0	0	0	0	0	0	4	7	FALSE	TRUE
23	4	M AZ1 K4 1D	TkStat1 MudDi8	0	0	0	0	0	0	4	7	FALSE	TRUE
23	5	M AZ1 K4 2A	TkStat2 MudDi1	0	0	0	0	0	0	4	7	FALSE	TRUE
23	6	M AZ1 K4 2B	TkStat2 MudDi2	0	0	0	0	0	0	4	7	FALSE	TRUE
23	7	M AZ1 K4 2C	TkStat2 MudDi4	0	0	0	0	0	0	4	7	FALSE	TRUE
23	8	M AZ1 K4 2D	TkStat2 MudDi8	0	0	0	0	0	0	4	7	FALSE	TRUE
23	9	M AZ2 K4 1A	TkStat1 MudDi1	0	0	0	0	0	0	4	7	FALSE	TRUE
23	10	M AZ2 K4 1B	TkStat1 MudDi2	0	0	0	0	0	0	4	7	FALSE	TRUE
23	11	M AZ2 K4 1C	TkStat1 MudDi4	0	0	0	0	0	0	4	7	FALSE	TRUE
23	12	M AZ2 K4 1D	TkStat1 MudDi8	0	0	0	0	0	0	4	7	FALSE	TRUE
23	13	M AZ2 K4 2A	TkStat2 MudDi1	0	0	0	0	0	0	4	7	FALSE	TRUE

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RCM	Pnt	Tag		Desc	Historian			Alarm			Color		Description	
					scan	def	Acc	pri	lo	hi	lo	hi	lo	hi
23	14	M	AZ2 K4 2B	TkStat2 MudDi2	0	0	0	0	0	0	4	7	FALSE	TRUE
23	15	M	AZ2 K4 2C	TkStat2 MudDi4	0	0	0	0	0	0	4	7	FALSE	TRUE
23	16	M	AZ2 K4 2D	TkStat2 MudDi8	0	0	0	0	0	0	4	7	FALSE	TRUE
23	17	YA	AZ1 K4 1M	Az1Macro Status	0	0	0	3	0	1	2	7	NORMAL	FAULT
23	18	YA	AZ2 K4 1M	Az2Macro Status	0	0	0	3	0	1	2	7	NORMAL	FAULT
23	19	YA	RCM A24 1	RcmA24 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
23	20	YA	RCM A51 1	RcmA51 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
23	21	YA	RCM D28 1	RcmD28 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
23	22	YA	RCM D52 1	RcmD52 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
23	23	YA	RCM D53 1	RcmD53 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
23	24	YA	RCM DR31 1	RcmDr31 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
23	25	YA	RCM DR54 1	RcmDr54 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
23	26	YA	RCM F50 1	RcmF50 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
23	27	YA	U32 34 1	U32 34 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
23	28	YT	U32 23 1	U32-23 FBusVer	0	0	0	0	0	0	4	7	FALSE	TRUE
23	29	YT	U32 23 31	RcmDr31 FBusVer	0	0	0	0	0	0	4	7	FALSE	TRUE
23	30	YT	U32 23 54	RcmDr54 FBusVer	0	0	0	0	0	0	4	7	FALSE	TRUE
24	1	YT	RCM A24 1	RcmA24 FBusVer	0	0	0	0	0	0	4	7	FALSE	TRUE
28	1	YT	RCM D28 1	RcmD28 FBusVer	0	0	0	0	0	0	4	7	FALSE	TRUE
31	1	I	AZ CWP 1A	CWPump1ACurrent	0	0	0	0	0	0	4	7	FALSE	TRUE
31	2	I	AZ CWP 1B	CWPump1BCurrent	0	0	0	0	0	0	4	7	FALSE	TRUE
31	3	YA	AZ CWP 1A	CWPump1AStatus	0	0	0	2	0	1	2	3	NORMAL	FAULT
31	4	YA	AZ CWP 1AA	CWPump1AStdbySts	0	0	0	2	0	1	2	3	NORMAL	NO STDBY

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RCM	Pnt	Tag		Desc	Historian			Alarm			Color		Description	
					scan	def	Acc	pri	lo	hi	lo	hi	lo	hi
31	5	YA	AZ CWP 1B	CWPump1BStatus	0	0	0	2	0	1	2	3	NORMAL	FAULT
31	6	YA	AZ CWP 1BA	CWPump1BStdbdySts	0	0	0	2	0	1	2	3	NORMAL	NO STDBY
31	7	YA	AZ CWR 1	Chiller Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
31	8	YA	U32 23 31	RcmDr31 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
31	9	Y	AZ CWP 1AA	CWPump1AInterlok	0	0	0	0	0	0	4	7	FALSE	TRUE
31	10	Y	AZ CWP 1AC	CWPump1AXfrCmd	0	0	0	0	0	0	4	7	INACTIVE	TRANSFER
31	11	Y	AZ CWP 1BA	CWPump1BInterlok	0	0	0	0	0	0	4	7	FALSE	TRUE
31	12	Y	AZ CWP 1BC	CWPump1BXfrCmd	0	0	0	0	0	0	4	7	INACTIVE	TRANSFER
31	13	Y	AZ CWR 1	Chiller Interlok	0	0	0	0	0	0	4	7	FALSE	TRUE
31	14	YT	RCM DR31 1	RcmDr31 FBusVer	0	0	0	0	0	0	4	7	FALSE	TRUE
34	1	M	702 K26 1A	BvAcUnitMudDi2	0	0	0	0	0	0	4	7	FALSE	TRUE
34	2	M	702 K26 1B	BvAcUnitMudDi4	0	0	0	0	0	0	4	7	FALSE	TRUE
34	3	M	702 K35 1AA	BvFan1A MudDi2	0	0	0	0	0	0	4	7	FALSE	TRUE
34	4	M	702 K35 1AB	BvFan1A MudDi4	0	0	0	0	0	0	4	7	FALSE	TRUE
34	5	M	702 K35 1AC	BvFan1A MudDi8	0	0	0	0	0	0	4	7	FALSE	TRUE
34	6	M	702 K35 1BA	BvFan1B MudDi2	0	0	0	0	0	0	4	7	FALSE	TRUE
34	7	M	702 K35 1BB	BvFan1B MudDi4	0	0	0	0	0	0	4	7	FALSE	TRUE
34	8	M	702 K35 1BC	BvFan1B MudDi8	0	0	0	0	0	0	4	7	FALSE	TRUE
34	9	M	AY1 K4 1A	TkStat1 MudDi1	0	0	0	0	0	0	4	7	FALSE	TRUE
34	10	M	AY1 K4 1B	TkStat1 MudDi2	0	0	0	0	0	0	4	7	FALSE	TRUE
34	11	M	AY1 K4 1C	TkStat1 MudDi4	0	0	0	0	0	0	4	7	FALSE	TRUE
34	12	M	AY1 K4 1D	TkStat1 MudDi8	0	0	0	0	0	0	4	7	FALSE	TRUE
34	13	M	AY1 K4 2A	TkStat2 MudDi1	0	0	0	0	0	0	4	7	FALSE	TRUE

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RCM	Pnt	Tag		Desc	Historian			Alarm			Color		Description	
					scan	def	Acc	pri	lo	hi	lo	hi	lo	hi
34	14	M	AY1 K4 2B	TkStat2 MudDi2	0	0	0	0	0	0	4	7	FALSE	TRUE
34	15	M	AY1 K4 2C	TkStat2 MudDi4	0	0	0	0	0	0	4	7	FALSE	TRUE
34	16	M	AY1 K4 2D	TkStat2 MudDi8	0	0	0	0	0	0	4	7	FALSE	TRUE
34	17	M	AY2 K4 1A	TkStat1 MudDi1	0	0	0	0	0	0	4	7	FALSE	TRUE
34	18	M	AY2 K4 1B	TkStat1 MudDi2	0	0	0	0	0	0	4	7	FALSE	TRUE
34	19	M	AY2 K4 1C	TkStat1 MudDi4	0	0	0	0	0	0	4	7	FALSE	TRUE
34	20	M	AY2 K4 1D	TkStat1 MudDi8	0	0	0	0	0	0	4	7	FALSE	TRUE
34	21	M	AY2 K4 2A	TkStat2 MudDi1	0	0	0	0	0	0	4	7	FALSE	TRUE
34	22	M	AY2 K4 2B	TkStat2 MudDi2	0	0	0	0	0	0	4	7	FALSE	TRUE
34	23	M	AY2 K4 2C	TkStat2 MudDi4	0	0	0	0	0	0	4	7	FALSE	TRUE
34	24	M	AY2 K4 2D	TkStat2 MudDi8	0	0	0	0	0	0	4	7	FALSE	TRUE
34	25	YA	702 K3 1M	K3Macro Status	0	0	0	3	0	1	2	7	NORMAL	FAULT
34	26	YA	AY1 K4 1M	Ay1MacroStatus	0	0	0	3	0	1	2	7	NORMAL	FAULT
34	27	YA	AY2 K4 1M	Ay2MacroStatus	0	0	0	3	0	1	2	7	NORMAL	FAULT
34	28	YA	RCM A35 1	RcmA35 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
34	29	YA	RCM A36 1	RcmA36 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
34	30	YA	RCM A46 1	RcmA46 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
34	31	YA	RCM D39 1	RcmD39 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
34	32	YA	RCM D47 1	RcmD47 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
34	33	YA	RCM D48 1	RcmD48 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
34	35	YA	RCM DR40 1	RcmDr40 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
34	36	YA	RCM DR49 1	RcmDr49 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
34	37	YA	RCM F45 1	RcmF45 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT

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RCM	Pnt	Tag	Desc	Historian			Alarm			Color		Description	
				scan	def	Acc	pri	lo	hi	lo	hi	lo	hi
34	38	YA U32 23 1	U32 23 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
34	39	YT U32 34 1	U32 34 FBusVer	0	0	0	0	0	0	4	7	FALSE	TRUE
34	40	YT U32 34 40	RcmDr40 FBusVer	0	0	0	0	0	0	4	7	FALSE	TRUE
34	41	YT U32 34 49	RcmDr49 FBusVer	0	0	0	0	0	0	4	7	FALSE	TRUE
35	1	PDAH 702K24 1	FtrRmA HepaDpHi	0	0	0	2	0	1	2	3	NORMAL	HIGH
35	2	PDAH 702K24 2	FtrRmB HepaDpHi	0	0	0	2	0	1	2	3	NORMAL	HIGH
35	3	PDAH 702K2 7	VntC/FtrRms DpHi	0	0	0	2	0	1	2	3	NORMAL	HIGH
35	4	PDAH 702K2 8	FtrRms/ SkRmDpHi	0	0	0	2	0	1	2	3	NORMAL	HIGH
35	5	PDAL 702K2 1	StkMonRmDpLo	0	0	0	2	0	1	2	3	NORMAL	LOW
35	6	PDAL 702K2 2	FtrRmA DpLo	0	0	0	2	0	1	2	3	NORMAL	LOW
35	7	PDAL 702K2 3	FtrRmB DpLo	0	0	0	2	0	1	2	3	NORMAL	LOW
35	8	PDAL 702K2 7	VntC/FtrRms DpLo	0	0	0	2	0	1	2	3	NORMAL	LOW
35	9	PDAL 702K2 8	FtrRms/ SkRmDpLo	0	0	0	2	0	1	2	3	NORMAL	LOW
35	10	YT RCM A35 1	RcmA35 FBusVer	0	0	0	0	0	0	4	7	FALSE	TRUE
36	1	PDAL 702K3 1	VentCellDpLo	0	0	0	2	0	1	2	3	NORMAL	LOW
36	2	YT RCM A36 1	RcmA36 FBusVer	0	0	0	0	0	0	4	7	FALSE	TRUE
36	3	M 702 K3 1AA	FitrBk1A MudDi2	0	0	0	0	0	0	4	7	FALSE	TRUE
36	4	M 702 K3 1AB	FitrBk1A MudDi8	0	0	0	0	0	0	4	7	FALSE	TRUE
36	5	M 702 K3 1BA	FitrBk1B MudDi2	0	0	0	0	0	0	4	7	FALSE	TRUE
36	6	M 702 K3 1BB	FitrBk1B MudDi8	0	0	0	0	0	0	4	7	FALSE	TRUE
36	7	M 702 K3 1AC	FitrBk1A MudDi4	0	0	0	0	0	0	4	7	FALSE	TRUE
36	8	M 702 K3 1BC	FitrBk1B MudDi4	0	0	0	0	0	0	4	7	FALSE	TRUE
36	9	YS 702 K35 1A3	BldFan1APIDReady	0	0	0	0	0	0	4	7	NT READY	READY

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RCM	Pnt	Tag	Desc	Historian			Alarm			Color		Description	
				scan	def	Acc	pri	lo	hi	lo	hi	lo	hi
36	10	YS 702 K35 1B3	BldFan1BPIDReady	0	0	0	0	0	0	4	7	NT READY	READY
36	11	PAL 702 K35 1	BVHdr PressLo	0	0	0	2	0	1	2	3	NORMAL	LO
36	12	PAH 702 K35 1	BVHdr PressHi	0	0	0	2	0	1	2	3	NORMAL	HI
36	13	FAH 702 K3 3	BVStk FlowHi	0	0	0	2	0	1	2	3	NORMAL	HI
36	14	PDAH 702K33 1A	BVPreFltDPHi	0	0	0	2	0	1	2	3	NORMAL	HI
36	15	PDAH 702K33 1B	BVPreFltDPHi	0	0	0	2	0	1	2	3	NORMAL	HI
39	1	YT RCM D39 1	RcmD39 FBusVer	0	0	0	4	0	0	4	7	FALSE	TRUE
40	1	I 702 K35 1A	BvFanA Current	0	0	0	4	0	0	4	7	FALSE	TRUE
40	2	I 702 K35 1B	BvFanB Current	0	0	0	4	0	0	4	7	FALSE	TRUE
40	3	YA 702 K26 1	BldgAc Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
40	4	YA 702 K35 1A	BvFanA Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
40	5	YA 702 K35 1AA	BvFan1A StdbySts	0	0	0	2	0	1	2	3	NORMAL	NO STDBY
40	6	YA 702 K35 1B	BvFanB Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
40	7	YA 702 K35 1BA	BvFan1B StdbySts	0	0	0	2	0	1	2	3	NORMAL	NO STDBY
40	8	YA U32 34 40	RcmDr40 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
40	9	Y 702 K26 1	BvAcUnitInterlok	0	0	0	4	0	0	4	7	FALSE	TRUE
40	10	Y 702 K3 2AA	BvDmpr2AInterlok	0	0	0	4	0	0	4	7	FALSE	TRUE
40	11	Y 702 K3 2AB	BvDmpr2AAutoOvrd	0	0	0	4	0	0	4	7	FALSE	TRUE
40	12	Y 702 K3 2AC	BvDmpr2AIllokCall	0	0	0	4	0	0	4	7	FALSE	TRUE
40	13	Y 702 K3 2AD	BvDmpr2AIllokTrip	0	0	0	4	0	0	4	7	FALSE	TRUE
40	14	Y 702 K3 2BA	BvDmpr2BInterlok	0	0	0	4	0	0	4	7	FALSE	TRUE
40	15	Y 702 K3 2BB	BvDmpr2BAutoOvrd	0	0	0	4	0	0	4	7	FALSE	TRUE
40	16	Y 702 K3 2BC	BvDmpr2BIllokCall	0	0	0	4	0	0	4	7	FALSE	TRUE

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RCM	Pnt	Tag		Desc	Historian			Alarm			Color		Description	
					scan	def	Acc	pri	lo	hi	lo	hi	lo	hi
40	17	Y	702 K3 2BD	BvDmpr2BllokTrip	0	0	0	4	0	0	4	7	FALSE	TRUE
40	18	Y	702 K35 1AA	BvFanA Interlok	0	0	0	4	0	0	4	7	FALSE	TRUE
40	19	Y	702 K35 1AB	BvFanB StrtCmd	0	0	0	4	0	0	4	7	INACTIVE	START
40	20	Y	702 K35 1AC	BvFanA XfrCmd	0	0	0	4	0	0	4	7	INACTIVE	TRANSFER
40	21	Y	702 K35 1BA	BvFanB Interlok	0	0	0	4	0	0	4	7	FALSE	TRUE
40	22	Y	702 K35 1BB	BvFanB StrtCmd	0	0	0	4	0	0	4	7	INACTIVE	START
40	23	Y	702 K35 1BC	BvFanB XfrCmd	0	0	0	4	0	0	4	7	INACTIVE	TRANSFER
40	26	ZA	702 K3 2A	BvDmpr2AStatus	0	0	0	2	0	1	2	3	NORMAL	FAULT
40	27	ZA	702 K3 2B	BvDmpr2BStatus	0	0	0	2	0	1	2	3	NORMAL	FAULT
40	28	YT	RCM DR40 1	RcmDr40 FBusVer	0	0	0	4	0	0	4	7	FALSE	TRUE
40	29	YS	702 K35 1A2	BvFan1A Off	0	0	0	0	0	0	4	7	FALSE	TRUE
40	30	YS	702 K35 1B2	BvFan1B Off	0	0	0	0	0	0	4	7	FALSE	TRUE
45	1	YT	RCM F45 1	RcmF45 FBusVer	0	0	0	4	0	0	4	7	FALSE	TRUE
46	1	YT	RCM A46 1	RcmA46 FBusVer	0	0	0	0	0	0	4	7	FALSE	TRUE
47	1	YT	RCM D47 1	RcmD47 FBusVer	0	0	0	4	0	0	4	7	FALSE	TRUE
47	2	ZA	AY1 K4 1	InDmpr Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
47	3	ZA	AY1 K4 1A	TkRerc DmprLnUp	0	0	0	2	0	1	2	3	NORMAL	FAULT
47	4	ZA	AY1 K4 2	OutDmpr Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
47	5	ZA	AY1 K4 3	RtnDmpr Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
47	6	ZA	AY1 K4 4	BypsDmprStatus	0	0	0	2	0	1	2	3	NORMAL	FAULT
47	7	Z	AY1 K4 1	TkRerc DmprLnUp	0	0	0	4	0	0	4	7	FALSE	TRUE
47	8	Z	AY1 K4 2	TkVent DmprLnUp	0	0	0	4	0	0	4	7	FALSE	TRUE
47	9	Z	AY1 K4 3	TkHiHeatDmprLnUp	0	0	0	4	0	0	4	7	FALSE	TRUE

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RCM	Pnt	Tag	Desc	Historian		Acc	Alarm			Color		Description	
				scan	def		pri	lo	hi	lo	hi	lo	hi
47	10	Z AY1 K4 4	Tank DmprLnUp	0	0	0	4	0	0	4	7	FALSE	TRUE
47	11	M AY1 K1 1A	TkInFltr MudDi1	0	0	0	4	0	0	4	7	FALSE	TRUE
47	12	M AY1 K1 1B	TkInFltr MudDi2	0	0	0	4	0	0	4	7	FALSE	TRUE
47	13	Y AY1 K4 1A	RECIRC	0	0	0	4	0	0	4	7	DESC LO	DESC HI
47	14	Y AY1 K4 1B	HIGH HEAT	0	0	0	4	0	0	4	7	DESC LO	DESC HI
47	15	Y AY1 K4 1C	VD4715 DESCRIPTION	0	0	0	4	0	0	7	7	DESC LO	DESC HI
48	1	YT RCM D48 1	RcmD48 FBusVer	0	0	0	4	0	0	4	7	FALSE	TRUE
48	2	ZA AY2 K4 1	InDmpr Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
48	3	ZA AY2 K4 1A	TkRerc DmprLnUp	0	0	0	2	0	1	2	3	NORMAL	FAULT
48	4	ZA AY2 K4 2	OutDmpr Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
48	5	ZA AY2 K4 3	RtnDmpr Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
48	6	ZA AY2 K4 4	BypsdmprStatus	0	0	0	2	0	1	2	3	NORMAL	FAULT
48	7	Z AY2 K4 1	TkRerc DmprLnUp	0	0	0	4	0	0	4	7	FALSE	TRUE
48	8	Z AY2 K4 2	TkVent DmprLnUp	0	0	0	4	0	0	4	7	FALSE	TRUE
48	9	Z AY2 K4 3	TkHiHeatDmprLnUp	0	0	0	4	0	0	4	7	FALSE	TRUE
48	10	Z AY2 K4 4	Tank DmprLnUp	0	0	0	4	0	0	4	7	FALSE	TRUE
48	11	M AY2 K1 1A	TkInFltr MudDi1	0	0	0	4	0	0	4	7	FALSE	TRUE
48	12	M AY2 K1 1B	TkInFltr MudDi2	0	0	0	4	0	0	4	7	FALSE	TRUE
48	13	Y AY2 K4 1A	RECIRC	0	0	0	4	0	0	4	7	DESC LO	DESC HI
48	14	Y AY2 K4 1B	HIGH HEAT	0	0	0	4	0	0	4	7	DESC LO	DESC HI
48	15	Y AY2 K4 1C	VENT	0	0	0	4	0	0	4	7	DESC LO	DESC HI
49	1	I AY1 EWP 1A	EwPump1ACurrent	0	0	0	4	0	0	4	7	FALSE	TRUE
49	2	I AY1 EWP 1B	EWump1BCurrent	0	0	0	4	0	0	4	7	FALSE	TRUE

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RCM	Pnt	Tag	Desc	Historian			Alarm			Color		Description	
				scan	def	Acc	pri	lo	hi	lo	hi	lo	hi
49	3	I AY1 K45 1	RrcrFan Current	0	0	0	4	0	0	4	7	FALSE	TRUE
49	4	I AY2 EWP 1A	EW Pump1A Current	0	0	0	4	0	0	4	7	FALSE	TRUE
49	5	I AY2 EWP 1B	EW Pump1B Current	0	0	0	4	0	0	4	7	FALSE	TRUE
49	6	I AY2 K45 1	RrcrFan Current	0	0	0	4	0	0	4	7	FALSE	TRUE
49	7	YA AY1 EWP 1A	EW Pump1A Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
49	8	YA AY1 EWP 1AA	EW Pump1A Stdbys	0	0	0	2	0	1	2	3	NORMAL	NO STDBY
49	9	YA AY1 EWP 1B	EW Pump1B Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
49	10	YA AY1 EWP 1BA	EW Pump1B Stdbys	0	0	0	2	0	1	2	3	NORMAL	NO STDBY
49	11	YA AY1 EWSP 1	EW Sp Pump Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
49	12	YA AY1 EWT 1	EW Tower Fan Sts	0	0	0	2	0	1	2	3	NORMAL	FAULT
49	13	YA AY1 K45 1	RrcrFan Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
49	14	YA AY2 EWP 1A	EW Pump1A Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
49	15	YA AY2 EWP 1AA	EW Pump1A Stdbys	0	0	0	2	0	1	2	3	NORMAL	NO STDBY
49	16	YA AY2 EWP 1B	EW Pump1B Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
49	17	YA AY2 EWP 1BA	EW Pump1B Stdbys	0	0	0	2	0	1	2	3	NORMAL	NO STDBY
49	18	YA AY2 EWSP 1	EW Sp Pump Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
49	19	YA AY2 EWT 1	EW Tower Fan Sts	0	0	0	2	0	1	2	3	NORMAL	FAULT
49	20	YA AY2 K45 1	RrcrFan Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
49	21	YA U32 34 49	RcmDr49 CommFail	0	0	0	1	0	1	2	1	NORMAL	FAULT
49	22	Y AY1 EWP 1AA	EW Pump1A Interlok	0	0	0	4	0	0	4	7	FALSE	TRUE
49	23	Y AY1 EWP 1AC	EW Pump1A XfrCmd	0	0	0	4	0	0	4	7	INACTIVE	TRANSFER
49	24	Y AY1 EWP 1BA	EW Pump1B Interlok	0	0	0	4	0	0	4	7	FALSE	TRUE
49	25	Y AY1 EWP 1BC	EW Pump1B XfrCmd	0	0	0	4	0	0	4	7	INACTIVE	TRANSFER

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RCM	Pnt	Tag	Desc	Historian			Alarm			Color			Description	
				scan	def	Acc	pri	lo	hi	lo	hi	lo	hi	hi
49	26	Y AY1 K45 1	RercFan Interlok	0	0	0	4	0	0	4	7	FALSE	TRUE	TRUE
49	27	Y AY2 EWP 1AA	EW Pump1A Interlok	0	0	0	4	0	0	4	7	FALSE	TRUE	TRUE
49	28	Y AY2 EWP 1AC	EW Pump1A XfrCmd	0	0	0	4	0	0	4	7	INACTIVE	TRANSFER	TRANSFER
49	29	Y AY2 EWP 1BA	EW Pump1B Interlok	0	0	0	4	0	0	4	7	FALSE	TRUE	TRUE
49	30	Y AY2 EWP 1BC	EW Pump1B XfrCmd	0	0	0	4	0	0	4	7	INACTIVE	TRANSFER	TRANSFER
49	31	Y AY2 K45 1	RercFan Interlok	0	0	0	4	0	0	4	7	FALSE	TRUE	TRUE
49	32	YT RCM DR49 1	RcmDr49 FBusVer	0	0	0	4	0	0	4	7	DESC LO	DESC HI	DESC HI
50	1	YT RCM F50 1	RcmF50 FBusVer	0	0	0	4	0	0	4	7	FALSE	TRUE	TRUE
51	1	YT RCM A51 1	RcmA51 FBusVer	0	0	0	0	0	0	4	7	FALSE	TRUE	TRUE
52	1	YT RCM D52 1	RcmD52 FBusVer	0	0	0	4	0	0	4	7	FALSE	TRUE	TRUE
52	2	ZA AZ1 K4 1	InDmpr Status	0	0	0	2	0	1	2	3	NORMAL	FAULT	FAULT
52	3	ZA AZ1 K4 1A	TRCrc DmprLnUp	0	0	0	2	0	1	2	3	NORMAL	FAULT	FAULT
52	4	ZA AZ1 K4 2	OutDmpr Status	0	0	0	2	0	1	2	3	NORMAL	FAULT	FAULT
52	5	ZA AZ1 K4 3	RmDmpr Status	0	0	0	2	0	1	2	3	NORMAL	FAULT	FAULT
52	6	ZA AZ1 K4 4	BypsdmprStatus	0	0	0	2	0	1	2	3	NORMAL	FAULT	FAULT
52	7	Z AZ1 K4 1	TRCrc DmprLnUp	0	0	0	4	0	0	4	7	FALSE	TRUE	TRUE
52	8	Z AZ1 K4 2	TKVent DmprLnUp	0	0	0	4	0	0	4	7	FALSE	TRUE	TRUE
52	9	Z AZ1 K4 3	TRHHeatDmprLnUp	0	0	0	4	0	0	4	7	FALSE	TRUE	TRUE
52	10	Z AZ1 K4 4	Tank DmprLnUp	0	0	0	4	0	0	4	7	FALSE	TRUE	TRUE
52	11	M AZ1 K1 1A	TKnFltrMudDi1	0	0	0	4	0	0	4	7	FALSE	TRUE	TRUE
52	12	M AZ1 K1 1B	TKnFltrMudDi2	0	0	0	4	0	0	4	7	FALSE	TRUE	TRUE
52	13	Y AZ1 K4 1A	RECIRC	0	0	0	4	0	0	7	7	DESC LO	DESC HI	DESC HI
52	14	Y AZ1 K4 1B	HIGH HEAT	0	0	0	4	0	0	7	7	DESC LO	DESC HI	DESC HI

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RCM	Pnt	Tag	Desc	Historian			Alarm			Color		Description	
				scan	def	Acc	pri	lo	hi	lo	hi	lo	hi
52	15	Y AZ1 K4 1C	VENT	0	0	0	4	0	0	7	7	DESC LO	DESC HI
53	1	YT RCM D53 1	RcmD53 FBusVer	0	0	0	4	0	0	4	7	FALSE	TRUE
53	2	ZA AZ2 K4 1	InDmpr Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
53	3	ZA AZ2 K4 1A	TkRerc DmprLnUp	0	0	0	2	0	1	2	3	NORMAL	FAULT
53	4	ZA AZ2 K4 2	OutDmpr Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
53	5	ZA AZ2 K4 3	RtnDmpr Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
53	6	ZA AZ2 K4 4	BypDmprStatus	0	0	0	2	0	1	2	3	NORMAL	FAULT
53	7	Z AZ2 K4 1	TkRerc DmprLnUp	0	0	0	4	0	0	4	7	FALSE	TRUE
53	8	Z AZ2 K4 2	TkVent DmprLnUp	0	0	0	4	0	0	4	7	FALSE	TRUE
53	9	Z AZ2 K4 3	TkHiHeatDmprLnUp	0	0	0	4	0	0	4	7	FALSE	TRUE
53	10	Z AZ2 K4 4	Tank DmprLnUp	0	0	0	4	0	0	4	7	FALSE	TRUE
53	11	M AZ2 K1 1A	TkInFltr MudDi1	0	0	0	4	0	0	4	7	FALSE	TRUE
53	12	M AZ2 K1 1B	TkInFltr MudDi2	0	0	0	4	0	0	4	7	FALSE	TRUE
53	13	Y AZ2 K4 1A	RECIRC	0	0	0	4	0	0	7	7	DESC LO	DESC HI
53	14	Y AZ2 K4 1B	HIGH HEAT	0	0	0	4	0	0	7	7	DESC LO	DESC HI
53	15	Y AZ2 K4 1C	VENT	0	0	0	4	0	0	7	7	DESC LO	DESC HI
54	1	I AZ1 EWP 1A	EW Pump1A Current	0	0	0	4	0	0	4	7	FALSE	TRUE
54	2	I AZ1 EWP 1B	EW Pump1B Current	0	0	0	4	0	0	4	7	FALSE	TRUE
54	3	I AZ1 K45 1	RercFan Current	0	0	0	4	0	0	4	7	FALSE	TRUE
54	4	I AZ2 EWP 1A	EW Pump1A Current	0	0	0	4	0	0	4	7	FALSE	TRUE
54	5	I AZ2 EWP 1B	EW Pump1B Current	0	0	0	4	0	0	4	7	FALSE	TRUE
54	6	I AZ2 K45 1	RercFan Current	0	0	0	4	0	0	4	7	FALSE	TRUE
54	7	YA AZ1 EWP 1A	EW Pump1A Status	0	0	0	2	0	1	2	3	NORMAL	FAULT

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RCM	Pnt	Tag		Desc	Historian			Alarm			Color		Description	
					scan	def	Acc	pri	lo	hi	lo	hi	lo	hi
54	8	YA	AZ1 EWP 1AA	EW Pump1A StdbY Sts	0	0	0	2	0	1	2	3	NORMAL	NO STDBY
54	9	YA	AZ1 EWP 1B	EW Pump1B Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
54	10	YA	AZ1 EWP 1BA	EW Pump1B StdbY Sts	0	0	0	2	0	1	2	3	NORMAL	NO STDBY
54	11	YA	AZ1 EWSP 1	EW Sp Pump Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
54	12	YA	AZ1 EWT 1	EW Tower Fan Sts	0	0	0	2	0	1	2	3	NORMAL	FAULT
54	13	YA	AZ1 K45 1	Rcrc Fan Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
54	14	YA	AZ2 EWP 1A	EW Pump1A Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
54	15	YA	AZ2 EWP 1AA	EW Pump1A StdbY Sts	0	0	0	2	0	1	2	3	NORMAL	NO STDBY
54	16	YA	AZ2 EWP 1B	EW Pump1B Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
54	17	YA	AZ2 EWP 1BA	EW Pump1B StdbY Sts	0	0	0	2	0	1	2	3	NORMAL	NO STDBY
54	18	YA	AZ2 EWSP 1	EW Sp Pump Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
54	19	YA	AZ2 EWT 1	EW Tower Fan Sts	0	0	0	2	0	1	2	3	NORMAL	FAULT
54	20	YA	AZ2 K45 1	Rcrc Fan Status	0	0	0	2	0	1	2	3	NORMAL	FAULT
54	21	YA	U32 23 54	Rcm Dr54 Comm Fail	0	0	0	1	0	1	2	1	NORMAL	FAULT
54	22	Y	AZ1 EWP 1AA	EW Pump1A Interlok	0	0	0	4	0	0	4	7	FALSE	TRUE
54	23	Y	AZ1 EWP 1AC	EW Pump1A Xfr Cmd	0	0	0	4	0	0	4	7	INACTIVE	TRANSFER
54	24	Y	AZ1 EWP 1BA	EW Pump1B Interlok	0	0	0	4	0	0	4	7	FALSE	TRUE
54	25	Y	AZ1 EWP 1BC	EW Pump1B Xfr Cmd	0	0	0	4	0	0	4	7	INACTIVE	TRANSFER
54	26	Y	AZ1 K45 1	Rcrc Fan Interlok	0	0	0	4	0	0	4	7	FALSE	TRUE
54	27	Y	AZ2 EWP 1AA	Ew Pump1A Interlok	0	0	0	4	0	0	4	7	FALSE	TRUE
54	28	Y	AZ2 EWP 1AC	Ew Pump1A Xfr Cmd	0	0	0	4	0	0	4	7	INACTIVE	TRANSFER
54	29	Y	AZ2 EWP 1BA	Ew Pump1B Interlok	0	0	0	4	0	0	4	7	FALSE	TRUE
54	30	Y	AZ2 EWP 1BC	Ew Pump1B Xfr Cmd	0	0	0	4	0	0	4	7	INACTIVE	TRANSFER

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RCM	Pnt	Tag		Desc	Historian			Alarm			Color		Description	
					scan	def	Acc	pri	lo	hi	lo	hi	lo	hi
54	31	Y	AZ2 K45 1	RcrcFan Interlok	0	0	0	4	0	0	4	7	FALSE	TRUE
54	32	YT	RCM DR54 1	RcmDr54 FBusVer	0	0	0	4	0	0	7	7	FALSE	TRUE

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MCS CONTROLLER
JUMPER REPORT

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MICON No.	TAG TYPE	CHAN	JUMPER	TAG NAME
2	AI	1	A2	FI_AZ1_K1_2
2	AI	2	A2	ZI_AZ1_K1_2
2	AI	3	A1	AI0203
2	AI	4	A1	AI0204
2	AI	5	A1	AI0205
2	AI	6	A2	FI_AZ2_K1_2
2	AI	7	A2	ZI_AZ2_K1_2
2	AI	8	A1	AI0208
2	AI	9	A4	AI0209
2	AI	10	A4	PDI_AZ_K18_1
2	AI	11	A4	AI0211
2	AI	12	A4	AI0212
2	AI	13	A4	AI0213
2	AI	14	A4	AI0214
2	AI	15	A4	TI_702_K2_1
2	AI	16	A4	TI_702_K2_2
2	AI	17	A4	TI_702_K2_4
2	AI	18	A4	AI0218
2	AI	19	A4	AI0219
2	AI	20	A4	AI0220
2	AI	21	A4	AI0221
2	AI	22	A4	AI0222
2	AI	23	A4	AI0223
2	AI	24	A4	AI0224
2	AI	25	A4	AI0225
2	AI	26	A4	AI0226
2	DI	31	A7	DI0201
2	DO	32	A9	YS_RCM_A2_1

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MICON No.	TAG TYPE	CHAN	JUMPER	TAG NAME
3	AI	1	A1	TI_AZ_K12_1A
3	AI	2	A1	AI0302
3	AI	3	A1	TI_AZ_K12_3A
3	AI	4	A1	AI0304
3	AI	5	A1	AI0305
3	AI	6	A1	AI0306
3	AI	7	A1	AI0307
3	AI	8	A1	AI0308
3	AI	9	A4	AI0309
3	AI	10	A4	PDI_AZ_K14_1A
3	AI	11	A4	PDI_AZ_K14_2A
3	AI	12	A4	PDI_AZ_K110_1A
3	AI	13	A4	AI0313
3	AI	14	A4	AI0314
3	AI	15	A5	II_AZ_K15_1A
3	AI	16	A5	SI_AZ_K15_1A
3	AI	17	A4	PI_AZ_K1_1A
3	AI	18	A4	AI0318
3	AI	19	A4	AI0319
3	AI	20	A4	AI0320
3	AI	21	A4	AI0321
3	AI	22	A4	AI0322
3	AI	23	A4	AI0323
3	AI	24	A4	AI0324
3	AI	25	A4	AI0325
3	AI	26	A4	AI0326
3	DI	31	A7	DI0301
3	DO	32	A9	YS_RCM_A3_1

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MICON No.	TAG TYPE	CHAN	JUMPER	TAG NAME
6	DI	1	D1	ZS_AZ__K18_1AA
6	DI	2	D1	ZS_AZ__K18_1AB
6	DI	3	D1	ZS_AZ__K18_1BA
6	DI	4	D1	ZS_AZ__K18_1BB
6	DI	5	D1	ZS_AZ__K18_1CA
6	DI	6	D1	ZS_AZ__K18_1CB
6	DI	7	D1	ZS_AZ__K1_3A
6	DI	8	D1	DI0608
6	DI	9	D1	DI0609
6	DI	10	D1	ZS_AZ__K1_1AA
6	DI	11	D1	ZS_AZ__K1_1AB
6	DI	12	D1	ZS_AZ__K1_2AA
6	DI	13	D1	ZS_AZ__K1_2AB
6	DI	14	D1	DI0614
6	DI	15	D1	DI0615
6	DI	16	D1	YS_AZ__K12_1A
6	DI	17	D1	YS_AZ__K12_1A1
6	DI	18	D1	DI0618
6	DI	19	D1	YS_AZ__K15_1AF
6	DI	20	D1	YS_AZ__K15_1A1
6	DI	21	D1	ZS_AZ__K15_1A1
6	DI	22	D1	ZS_AZ__K15_1A2
6	DI	23	D1	ZS_AZ__K15_1A3
6	DI	24	D1	DI0624
6	DI	25	D1	DI0625
6	DI	26	D1	DI0626
6	DI	27	D1	DI0627
6	DI	28	D1	DI0628
6	DI	31	D1	JAX_1__PS2_1
6	DO	29	D3	YS_AZ__K1WD_1A1
6	DO	30	D3	YS_AZ__K1WD_1A2
6	DO	32	D3	YS_RCM__D6_1

MICON No.	TAG TYPE	CHAN	JUMPER	TAG NAME
7	DI	1	D1	XA_AZ__EPRG_1
7	DI	2	D1	XA_AZ__EPRUPS_1
7	DI	3	D1	YS_AZ__EPR_1A
7	DI	4	D1	YS_AZ__EPR_1B
7	DI	5	D1	DI0705
7	DI	6	D1	LAL_AZ__EPRTK_1
7	DI	7	D1	LALL_AZ__EPRTK_1
7	DI	8	D1	YS_AZ__EPRG_1
7	DI	9	D1	DI0709
7	DI	10	D1	ZS_702__K2_6AA
7	DI	11	D1	ZS_702__K2_6AB
7	DI	12	D1	ZS_702__K2_6BA
7	DI	13	D1	ZS_702__K2_6BB
7	DI	14	D1	ZS_702__K2_7AA
7	DI	15	D1	ZS_702__K2_7AB
7	DI	16	D1	ZS_702__K2_7BA
7	DI	17	D1	ZS_702__K2_7BB
7	DI	18	D1	DI0718
7	DI	19	D1	DI0719
7	DI	20	D1	DI0720
7	DI	21	D1	DI0721
7	DI	22	D1	DI0722
7	DI	23	D1	DI0723
7	DI	24	D1	DI0724
7	DI	25	D1	DI0725
7	DI	26	D2	XS_RCM__A2_1A
7	DI	27	D2	XS_RCM__A3_1A
7	DI	28	D2	XS_RCM__D6_1A
7	DI	29	D1	XS_RCM__DR9_1A
7	DI	30	D1	XS_RCM__DR10_1A
7	DI	31	D1	JAX_1__PS1_1
7	DO	32	D3	YS_RCM__D7_1

MICON No.	TAG TYPE	CHAN	JUMPER	TAG NAME
13	AI	1	A2	FI_AY1_K1_2
13	AI	2	A2	ZI_AY1_K1_2
13	AI	3	A1	AI1303
13	AI	4	A1	AI1304
13	AI	5	A1	AI1305
13	AI	6	A2	FI_AY2_K1_2
13	AI	7	A2	ZI_AY2_K1_2
13	AI	8	A1	AI1308
13	AI	9	A4	AI1309
13	AI	10	A4	PDI_AZ_K19_1
13	AI	11	A4	AI1311
13	AI	12	A4	AI1312
13	AI	13	A4	AI1313
13	AI	14	A4	AI1314
13	AI	15	A4	TI_702_K2_3
13	AI	16	A4	TI_702_K2_5
13	AI	17	A4	AI1317
13	AI	18	A4	AI1318
13	AI	19	A4	AI1319
13	AI	20	A4	AI1320
13	AI	21	A4	AI1321
13	AI	22	A4	AI1322
13	AI	23	A4	AI1323
13	AI	24	A4	AI1324
13	AI	25	A4	AI1325
13	AI	26	A4	AI1326
13	DI	31	A7	DI1301
13	DO	32	A9	YS_RCM_AI13_1

MICON No.	TAG TYPE	CHAN	JUMPER	TAG NAME
14	AI	1	A1	TI_AZ_K12_1B
14	AI	2	A1	AI1402
14	AI	3	A1	TI_AZ_K12_3B
14	AI	4	A1	AI1404
14	AI	5	A2	FI_AZ_K1_1
14	AI	6	A2	FI_AZ_K1_2
14	AI	7	A2	FI_AZ_K1_3
14	AI	8	A2	RI_AZ_K1_1A
14	AI	9	A5	TI_AZ_K1_3
14	AI	10	A4	PDI_AZ_K14_1B
14	AI	11	A4	PDI_AZ_K14_2B
14	AI	12	A4	PDI_AZ_K110_1B
14	AI	13	A4	AI1413
14	AI	14	A4	AI1414
14	AI	15	A5	II_AZ_K15_1B
14	AI	16	A5	SI_AZ_K15_1B
14	AI	17	A4	PI_AZ_K1_1B
14	AI	18	A4	AI1418
14	AI	19	A4	AI1419
14	AI	20	A4	AI1420
14	AI	21	A4	AI1421
14	AI	22	A4	AI1422
14	AI	23	A4	AI1423
14	AI	24	A4	AI1424
14	AI	25	A4	AI1425
14	AI	26	A4	AI1426
14	DI	31	A7	DI1401
14	DO	32	A9	YS_RCM_A14_1

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MICON No.	TAG TYPE	CHAN	JUMPER	TAG NAME
17	DI	1	D1	ZS_AZ_K19_1AA
17	DI	2	D1	ZS_AZ_K19_1AB
17	DI	3	D1	ZS_AZ_K19_1BA
17	DI	4	D1	ZS_AZ_K19_1BB
17	DI	5	D1	ZS_AZ_K19_1CA
17	DI	6	D1	ZS_AZ_K19_1CB
17	DI	7	D1	ZS_AZ_K1_3B
17	DI	8	D1	DI1708
17	DI	9	D1	DI1709
17	DI	10	D1	ZS_AZ_K1_1BA
17	DI	11	D1	ZS_AZ_K1_1BB
17	DI	12	D1	ZS_AZ_K1_2BA
17	DI	13	D1	ZS_AZ_K1_2BB
17	DI	14	D1	DI1714
17	DI	15	D1	DI1715
17	DI	16	D1	YS_AZ_K12_1B
17	DI	17	D1	YS_AZ_K12_1B1
17	DI	18	D1	DI1718
17	DI	19	D1	YS_AZ_K15_1BF
17	DI	20	D1	YS_AZ_K15_1B1
17	DI	21	D1	ZS_AZ_K15_1B1
17	DI	22	D1	ZS_AZ_K15_1B2
17	DI	23	D1	ZS_AZ_K15_1B3
17	DI	24	D1	DI1724
17	DI	25	D1	RAH_AZ_K1_1
17	DI	26	D1	RAX_AZ_K1_1
17	DI	27	D1	DI1727
17	DI	28	D1	DI1728
17	DI	31	D1	JAX_2_PS2_1
17	DO	29	D3	YS_AZ_K1WD_1B1
17	DO	30	D3	YS_AZ_K1WD_1B2
17	DO	32	D3	YS_RCM_D17_1

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MICON No.	TAG TYPE	CHAN	JUMPER	TAG NAME
18	DI	1	D1	XA_AZ__EPRBAT_1
18	DI	2	D1	XA_AZ__EPRUPS_2
18	DI	3	D1	XA_AZ__EPRUPS_3
18	DI	4	D1	YS_AZ__EPR_2A
18	DI	5	D1	YS_AZ__EPR_2B
18	DI	6	D1	DI1806
18	DI	7	D1	DI1807
18	DI	8	D1	DI1808
18	DI	9	D1	DI1809
18	DI	10	D1	ZS_702_K2_8AA
18	DI	11	D1	ZS_702_K2_8AB
18	DI	12	D1	ZS_702_K2_8BA
18	DI	13	D1	ZS_702_K2_8BB
18	DI	14	D1	DI1814
18	DI	15	D1	DI1815
18	DI	16	D1	DI1816
18	DI	17	D1	DI1817
18	DI	18	D1	DI1818
18	DI	19	D1	DI1819
18	DI	20	D1	DI1820
18	DI	21	D1	DI1821
18	DI	22	D1	DI1822
18	DI	23	D1	DI1823
18	DI	24	D1	DI1824
18	DI	25	D1	DI1825
18	DI	26	D2	XS_RCM_A13_1A
18	DI	27	D2	XS_RCM_A14_1A
18	DI	28	D2	XS_RCM_D17_1A
18	DI	29	D1	XS_RCM_DR20_1A
18	DI	30	D1	XS_RCM_DR21_1A
18	DI	31	D1	JAX_2_PS1_1
18	DO	32	D3	YS_RCM_D18_1

MICON No.	TAG TYPE	CHAN	JUMPER	TAG NAME
24	AI	1	A1	TI_AZ_K18_1A
24	AI	2	A1	TI_AZ_K18_1B
24	AI	3	A1	AI2403
24	AI	4	A1	AI2404
24	AI	5	A2	RI_AZ_K19_1A
24	AI	6	A3	AI2406
24	AI	7	A1	AI2407
24	AI	8	A1	AI2408
24	AI	9	A4	AI2409
24	AI	10	A4	PDI_AZ_RWF_1
24	AI	11	A4	PI_AZ_RW_1
24	AI	12	A4	FI_AZ_RW_1
24	AI	13	A4	AI2413
24	AI	14	A4	AI2414
24	AI	15	A4	FI_AZ_CWR_1
24	AI	16	A4	II_AZ_CWP_1A
24	AI	17	A4	II_AZ_CWP_1B
24	AI	18	A4	TI_AZ_CWR_1
24	AI	19	A4	TI_AZ_CWS_1
24	AI	20	A4	AI2420
24	AI	21	A4	AI2421
24	AI	22	A4	AI2422
24	AI	23	A4	AI2423
24	AI	24	A4	AI2424
24	AI	25	A5	FI_AZ_PC_1
24	AI	26	A4	AI2426
24	DI	31	A7	DI2401
24	DI	32	A7	DI2402

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MICON No.	TAG TYPE	CHAN	JUMPER	TAG NAME
28	DI	1	D1	RAH_AZ_K19_1
28	DI	2	D1	RAX_AZ_K19_1
28	DI	3	D1	DI2803
28	DI	4	D1	DI2804
28	DI	5	D1	LDA_AY_1102_1
28	DI	6	D1	LDA_AZ_2102_1
28	DI	7	D1	LDA_V0608_1
28	DI	8	D1	LDA_AZ_503_1
28	DI	9	D1	LDA_702_1
28	DI	10	D1	LDA_702_2A
28	DI	11	D1	LDA_702_2B
28	DI	12	D1	DI2812
28	DI	13	D1	DI2813
28	DI	14	D1	DI2814
28	DI	15	D1	DI2815
28	DI	16	D1	YS_AZ_CWR_1
28	DI	17	D1	XA_AZ_CWR_1
28	DI	18	D1	YS_AZ_CWP_1A1
28	DI	19	D1	YS_AZ_CWP_1B1
28	DI	20	D1	LAL_AZ_CWTK_1
28	DI	21	D1	DI2821
28	DI	22	D1	DI2822
28	DI	23	D1	DI2823
28	DI	24	D1	DI2824
28	DI	25	D1	LAH_AZ_PCSP_1
28	DI	26	D1	LAL_AZ_PCSP_1
28	DI	27	D1	DI2827
28	DI	28	D1	DI2828
28	DI	29	D1	DI2829
28	DI	30	D1	JAX_3_PS2_1
28	DI	31	D1	JAX_3_PS1_1
28	DI	32	D1	DI2832

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MICON No.	TAG TYPE	CHAN	JUMPER	TAG NAME
35	AI	1	A1	PDI_702_K2_1
35	AI	2	A1	PDI_702_K2_2
35	AI	3	A1	PDI_702_K2_3
35	AI	4	A1	AI3504
35	AI	5	A1	AI3505
35	AI	6	A1	AI3506
35	AI	7	A1	AI3507
35	AI	8	A1	AI3508
35	AI	9	A4	AI3509
35	AI	10	A4	PDI_702_K24_1
35	AI	11	A4	PDI_702_K24_2
35	AI	12	A5	ZI_702_K24_1
35	AI	13	A5	ZI_702_K24_2
35	AI	14	A4	AI3514
35	AI	15	A4	AI3515
35	AI	16	A4	AI3516
35	AI	17	A4	AI3517
35	AI	18	A4	AI3518
35	AI	19	A4	AI3519
35	AI	20	A4	AI3520
35	AI	21	A4	AI3521
35	AI	22	A4	AI3522
35	AI	23	A4	AI3523
35	AI	24	A4	AI3524
35	AI	25	A4	AI3525
35	AI	26	A4	AI3526
35	DI	31	A7	DI3501
35	DI	32	A7	DI3502

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MICON No.	TAG TYPE	CHAN	JUMPER	TAG NAME
36	AI	1	A1	PI_702_K35_1
36	AI	2	A1	AI3602
36	AI	3	A1	AI3603
36	AI	4	A1	AI3604
36	AI	5	A1	AI3605
36	AI	6	A1	AI3606
36	AI	7	A1	PDI_702_K3_1
36	AI	8	A2	ZI_702_K3_1
36	AI	9	A4	AI3609
36	AI	10	A4	PDI_702_K33_1A
36	AI	11	A4	PDI_702_K33_1B
36	AI	12	A4	PDI_702_K34_1A
36	AI	13	A4	PDI_702_K34_1B
36	AI	14	A4	AI3614
36	AI	15	A4	II_702_K35_1A
36	AI	16	A4	II_702_K35_1B
36	AI	17	A4	AI3617
36	AI	18	A4	AI3618
36	AI	19	A4	AI3619
36	AI	20	A5	FI_702_K3_1
36	AI	21	A5	FI_702_K3_2
36	AI	22	A5	FI_702_K3_3
36	AI	23	A5	RI_702_K3_1A
36	AI	24	A5	TI_702_K3_3
36	AI	25	A4	AI3625
36	AI	26	A4	AI3626
36	DI	31	A7	DI3601
36	DI	32	A7	DI3602

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MICON No.	TAG TYPE	CHAN	JUMPER	TAG NAME
39	DI	1	D1	YS_702_K26_1
39	DI	2	D1	YS_702_K26_1A1
39	DI	3	D1	DI3903
39	DI	4	D1	DI3904
39	DI	5	D1	DI3905
39	DI	6	D1	DI3906
39	DI	7	D1	DI3907
39	DI	8	D1	DI3908
39	DI	9	D1	DI3909
39	DI	10	D1	DI3910
39	DI	11	D1	DI3911
39	DI	12	D1	DI3912
39	DI	13	D1	DI3913
39	DI	14	D1	DI3914
39	DI	15	D1	YS_702_K35_1A1
39	DI	16	D1	YS_702_K35_1B1
39	DI	17	D1	DI3917
39	DI	18	D1	DI3918
39	DI	19	D1	DI3919
39	DI	20	D1	ZS_702_K3_2AA
39	DI	21	D1	ZS_702_K3_2AB
39	DI	22	D1	ZS_702_K3_2BA
39	DI	23	D1	ZS_702_K3_2BB
39	DI	24	D1	DI3924
39	DI	25	D1	RAH_702_K3_1
39	DI	26	D1	RAX_702_K3_1
39	DI	27	D1	DI3927
39	DI	28	D1	DI3928
39	DI	29	D1	DI3929
39	DI	30	D1	JAX_4_PS2_1
39	DI	31	D1	JAX_4_PS1_1
39	DI	32	D1	DI3932

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MICON No.	TAG TYPE	CHAN	JUMPER	TAG NAME
46	AI	1	A2	FI_AY1_K1_1
46	AI	2	A1	AI4602
46	AI	3	A1	PI_AY1_K1_1
46	AI	4	A1	PI_AY1_K1_2
46	AI	5	A2	ZI_AY1_K1_1
46	AI	6	A1	II_AY1_K45_1
46	AI	7	A1	PDI_AY1_K45_1
46	AI	8	A1	PDI_AY1_K48_1
46	AI	9	A4	AI4609
46	AI	10	A4	FI_AY1_EWR_1
46	AI	11	A4	II_AY1_EWP_1A
46	AI	12	A4	II_AY1_EWP_1B
46	AI	13	A4	AI4613
46	AI	14	A4	AI4614
46	AI	15	A5	FI_AY2_K1_1
46	AI	16	A4	AI4616
46	AI	17	A4	PI_AY2_K1_1
46	AI	18	A4	PI_AY2_K1_2
46	AI	19	A5	ZI_AY2_K1_1
46	AI	20	A4	II_AY2_K45_1
46	AI	21	A4	PDI_AY2_K45_1
46	AI	22	A4	PDI_AY2_K48_1
46	AI	23	A4	AI4623
46	AI	24	A4	FI_AY2_EWR_1
46	AI	25	A4	II_AY2_EWP_1A
46	AI	26	A4	II_AY2_EWP_1B
46	DI	31	A7	DI4601
46	DI	32	A7	DI4602

MICON No.	TAG TYPE	CHAN	JUMPER	TAG NAME
47	DI	1	D1	PDAH_AYIK1_1
47	DI	2	D1	TAL_AY1_K12_1
47	DI	3	D1	DI4703
47	DI	4	D1	DI4704
47	DI	5	D1	LDA_AY_1200_1
47	DI	6	D1	LDA_AY_1202_1
47	DI	7	D1	LDA_AY_401_1
47	DI	8	D1	DI4708
47	DI	9	D1	YS_AY1_K45_1A1
47	DI	10	D1	ZS_AY1_K4_1A
47	DI	11	D1	ZS_AY1_K4_1B
47	DI	12	D1	ZS_AY1_K4_2A
47	DI	13	D1	ZS_AY1_K4_2B
47	DI	14	D1	ZS_AY1_K4_3A
47	DI	15	D1	ZS_AY1_K4_3B
47	DI	16	D1	ZS_AY1_K4_4A
47	DI	17	D1	ZS_AY1_K4_4B
47	DI	18	D1	DI4718
47	DI	19	D1	LALL_AY1EWT_1
47	DI	20	D1	PDAH_AY1WF_2
47	DI	21	D1	YS_AY1_EWSP_1
47	DI	22	D1	YS_AY1_EWT_1
47	DI	23	D1	LAL_AY1_EWTK_1
47	DI	24	D1	YS_AY1_EWT_1A1
47	DI	25	D1	YS_AY1_EWP_1A1
47	DI	26	D1	YS_AY1_EWP_1B1
47	DI	27	D1	DI4727
47	DI	28	D1	DI4728
47	DI	29	D1	DI4729
47	DI	30	D1	JAX_5_PSI_1
47	DI	31	D1	JAX_5_PSI_1
47	DI	32	D1	DI4732

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MICON No.	TAG TYPE	CHAN	JUMPER	TAG NAME
48	DI	1	D1	PDAH_AY2K1_1
48	DI	2	D1	TAL_AY2_K12_1
48	DI	3	D1	DI4803
48	DI	4	D1	DI4804
48	DI	5	D1	LDA_AY_2200_1
48	DI	6	D1	LDA_AY_2202_1
48	DI	7	D1	LDA_AY_402_1
48	DI	8	D1	DI4808
48	DI	9	D1	YS_AY2_K45_1A1
48	DI	10	D1	ZS_AY2_K4_1A
48	DI	11	D1	ZS_AY2_K4_1B
48	DI	12	D1	ZS_AY2_K4_2A
48	DI	13	D1	ZS_AY2_K4_2B
48	DI	14	D1	ZS_AY2_K4_3A
48	DI	15	D1	ZS_AY2_K4_3B
48	DI	16	D1	ZS_AY2_K4_4A
48	DI	17	D1	ZS_AY2_K4_4B
48	DI	18	D1	DI4818
48	DI	19	D1	LALL_AY2EWT_1
48	DI	20	D1	PDAH_AY2WF_2
48	DI	21	D1	YS_AY2_EWSP_1
48	DI	22	D1	YS_AY2_EWT_1
48	DI	23	D1	LAL_AY2_EWTK_1
48	DI	24	D1	YS_AY2_EWT_1A1
48	DI	25	D1	YS_AY2_EWP_1A1
48	DI	26	D1	YS_AY2_EWP_1B1
48	DI	27	D1	DI4827
48	DI	28	D1	DI4828
48	DI	29	D1	DI4829
48	DI	30	D1	DI4830
48	DI	31	D1	DI4831
48	DI	32	D1	DI4832

MICON No.	TAG TYPE	CHAN	JUMPER	TAG NAME
51	AI	1	A2	FI_AZ1_K1_1
51	AI	2	A1	AI5102
51	AI	3	A1	PI_AZ1_K1_1
51	AI	4	A1	PI_AZ1_K1_2
51	AI	5	A2	ZI_AZ1_K1_1
51	AI	6	A1	II_AZ1_K45_1
51	AI	7	A1	PDI_AZ1_K45_1
51	AI	8	A1	PDI_AZ1_K48_1
51	AI	9	A4	AI5109
51	AI	10	A4	FI_AZ1_EWR_1
51	AI	11	A4	II_AZ1_EWP_1A
51	AI	12	A4	II_AZ1_EWP_1B
51	AI	13	A4	AI5113
51	AI	14	A4	AI5114
51	AI	15	A5	FI_AZ2_K1_1
51	AI	16	A4	AI5116
51	AI	17	A4	PI_AZ2_K1_1
51	AI	18	A4	PI_AZ2_K1_2
51	AI	19	A5	ZI_AZ2_K1_1
51	AI	20	A4	II_AZ2_K45_1
51	AI	21	A4	PDI_AZ2_K45_1
51	AI	22	A4	PDI_AZ2_K48_1
51	AI	23	A4	AI5123
51	AI	24	A4	FI_AZ2_EWR_1
51	AI	25	A4	II_AZ2_EWP_1A
51	AI	26	A4	II_AZ2_EWP_1B
51	DI	31	A7	DI5101
51	DI	32	A7	DI5102

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MICON No.	TAG TYPE	CHAN	JUMPER	TAG NAME
52	DI	1	D1	PDAH_AZ1K1_1
52	DI	2	D1	TAL_AZ1_K12_1
52	DI	3	D1	DI5203
52	DI	4	D1	DI5204
52	DI	5	D1	LDA_AZ_1200_1
52	DI	6	D1	LDA_AZ_1202_1
52	DI	7	D1	LDA_AZ_401_1
52	DI	8	D1	DI5208
52	DI	9	D1	YS_AZ1_K45_1A1
52	DI	10	D1	ZS_AZ1_K4_1A
52	DI	11	D1	ZS_AZ1_K4_1B
52	DI	12	D1	ZS_AZ1_K4_2A
52	DI	13	D1	ZS_AZ1_K4_2B
52	DI	14	D1	ZS_AZ1_K4_3A
52	DI	15	D1	ZS_AZ1_K4_3B
52	DI	16	D1	ZS_AZ1_K4_4A
52	DI	17	D1	ZS_AZ1_K4_4B
52	DI	18	D1	DI5218
52	DI	19	D1	LALL_AZ1EWT_1
52	DI	20	D1	PDAH_AZ1WF_2
52	DI	21	D1	YS_AZ1_EWSP_1
52	DI	22	D1	YS_AZ1_EWT_1
52	DI	23	D1	LAL_AZ1_EWTK_1
52	DI	24	D1	YS_AZ1_EWT_1A1
52	DI	25	D1	YS_AZ1_EWP_1A1
52	DI	26	D1	YS_AZ1_EWP_1B1
52	DI	27	D1	DI5227
52	DI	28	D1	DI5228
52	DI	29	D1	DI5229
52	DI	30	D1	JAX_6_PS1_1
52	DI	31	D1	JAX_6_PS2_1
52	DI	32	D1	DI5232

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MICON No.	TAG TYPE	CHAN	JUMPER	TAG NAME
53	DI	1	D1	PDAH_AZ2K1_1
53	DI	2	D1	TAL_AZ2_K12_1
53	DI	3	D1	DI5303
53	DI	4	D1	DI5304
53	DI	5	D1	LDA_AZ_2200_1
53	DI	6	D1	LDA_AZ_2202_1
53	DI	7	D1	LDA_AZ_402_1
53	DI	8	D1	DI5308
53	DI	9	D1	YS_AZ2_K45_1A1
53	DI	10	D1	ZS_AZ2_K4_1A
53	DI	11	D1	ZS_AZ2_K4_1B
53	DI	12	D1	ZS_AZ2_K4_2A
53	DI	13	D1	ZS_AZ2_K4_2B
53	DI	14	D1	ZS_AZ2_K4_3A
53	DI	15	D1	ZS_AZ2_K4_3B
53	DI	16	D1	ZS_AZ2_K4_4A
53	DI	17	D1	ZS_AZ2_K4_4B
53	DI	18	D1	DI5318
53	DI	19	D1	LALL_AZ2EWT_1
53	DI	20	D1	PDAH_AZ2WF_2
53	DI	21	D1	YS_AZ2_EWSP_1
53	DI	22	D1	YS_AZ2_EWT_1
53	DI	23	D1	LAL_AZ2_EWTK_1
53	DI	24	D1	YS_AZ2_EWT_1A1
53	DI	25	D1	YS_AZ2_EWP_1A1
53	DI	26	D1	YS_AZ2_EWP_1B1
53	DI	27	D1	DI5327
53	DI	28	D1	DI5328
53	DI	29	D1	DI5329
53	DI	30	D1	DI5330
53	DI	31	D1	DI5331
53	DI	32	D1	DI5332

No.	I/O CHAN	JUMPER	NOTES
A1	1-8		*FOR 2-WIRE ISOLATED TRANSMITTERS WHERE POWER IS SUPPLIED BY CONTROLLER
A2			FOR 4-WIRE CURRENT TRANSMITTERS WHERE POWER IS NOT SUPPLIED BY CONTROLLER
A3			FOR VOLTAGE INPUTS
A4	9-26		*FOR 2-WIRE ISOLATED TRANSMITTERS WHERE POWER IS SUPPLIED BY CONTROLLER
A5			FOR 4-WIRE CURRENT TRANSMITTERS WHERE POWER IS NOT SUPPLIED BY CONTROLLER
A6			FOR VOLTAGE INPUTS
A7	31-32		*FOR SIMULTANEOUS DISCRETE INPUTS & OUTPUTS. POWER SUPPLIED BY CONTROLLER FOR INPUT ONLY.
A8			FOR DISCRETE INPUTS ONLY. CONTROLLER INPUTS ARE ISOLATED.
A9			FOR DISCRETE OUTPUTS ONLY. CONTROLLER CAN SUPPLY POWER FOR LOAD.
A10			FOR FREQUENCY/PULSE PREAMPLIFIER INPUT. POWER SUPPLIED BY CONTROLLER.

* - FACTORY DEFAULT PLACEMENT

No.	I/O CHAN	JUMPER	NOTES
D1	ALL		* FOR SIMULTANEOUS DISCRETE INPUTS & OUTPUTS. POWER SUPPLIED BY CONTROLLER FOR INPUT ONLY.
D2			FOR DISCRETE INPUTS ONLY. CONTROLLER INPUTS ARE ISOLATED.
D3			FOR DISCRETE OUTPUTS ONLY. CONTROLLER CAN SUPPLY POWER FOR LOAD.
D4			FOR FREQUENCY/PULSE PREAMPLIFIER INPUT. POWER SUPPLIED BY CONTROLLER.

* - FACTORY DEFAULT PLACEMENT