

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION
TECHNICAL REPORT DOCUMENTATION PAGE
TR0003 (REV 10/98)

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

1. REPORT NUMBER CA24-4025	2. GOVERNMENT ASSOCIATION NUMBER N/A	3. RECIPIENT'S CATALOG NUMBER N/A
4. TITLE AND SUBTITLE Public Safety Power Shutdown (PSPS) Hydrogen Fuel Cell Mitigation Pilot		5. REPORT DATE 6/05/2024
		6. PERFORMING ORGANIZATION CODE AHMCT Research Center, UC Davis
7. AUTHOR Dave Torick and Shima Nazari		8. PERFORMING ORGANIZATION REPORT NO. UCD-ARR-24-06-05-01
9. PERFORMING ORGANIZATION NAME AND ADDRESS AHMCT Research Center UCD Dept. of Mechanical & Aerospace Engineering Davis, California 95616-5294		10. WORK UNIT NUMBER N/A
		11. CONTRACT OR GRANT NUMBER 65A0749 Task 4025
		13. TYPE OF REPORT AND PERIOD COVERED Final Report April 2022 – June 2024
12. SPONSORING AGENCY AND ADDRESS California Department of Transportation P.O. Box 942873, MS #83 Sacramento, CA 94273-0001		14. SPONSORING AGENCY CODE Caltrans
15. SUPPLEMENTARY NOTES N/A		
16. ABSTRACT <p>This final report provides an overview of the evaluation of hydrogen fuel cell (HFC) systems as a backup power solution for areas prone to public safety power shutoffs (PSPS). There is a pressing need for reliable and sustainable power solutions amidst increasing wildfire risks. Despite attempts to install four systems in PSPS-affected locations, performance issues led to project modifications. This report outlines procurement, testing, and site preparation efforts. The evaluated system did not meet reliability expectations, prompting termination of active research and recommendations for continued monitoring of HFC technology advancements. The report underscores the potential benefits of HFC systems during PSPS events and suggests ongoing assessments of installed systems to track performance improvements that may be present beyond the system that was tested in this report.</p>		
17. KEY WORDS Hydrogen Fuel Cell, Battery Backup Systems, HFC, BBS, Public Safety Power Shutdown, PSPS	18. DISTRIBUTION STATEMENT <p>No restrictions. This document is available to the public through the National Technical Information Service, Springfield, Virginia 22161.</p>	
19. SECURITY CLASSIFICATION (of this report) Unclassified	20. NUMBER OF PAGES 151	21. COST OF REPORT CHARGED N/A

Reproduction of completed page authorized

DISCLAIMER

The research reported herein was performed by the Advanced Highway Maintenance and Construction Technology (AHMCT) Research Center, within the Department of Mechanical and Aerospace Engineering at the University of California – Davis, for the Division of Research, Innovation and System Information (DRISI) at the California Department of Transportation. AHMCT and DRISI work collaboratively to complete valuable research for the California Department of Transportation.

This document is disseminated in the interest of information exchange. The contents of this report reflect the views of the authors who are responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the State of California or the Federal Highway Administration. This publication does not constitute a standard, specification, or regulation. This report does not constitute an endorsement by the Department of any product described herein.

The contents of this report do not necessarily reflect the official views or policies of the University of California. This report does not constitute an endorsement by the University of California of any product described herein.

For individuals with sensory disabilities, this document is available in alternate formats. For information, call (916) 654-8899, TTY 711, or write to California Department of Transportation, Division of Research, Innovation and System Information, MS-83, P.O. Box 942873, Sacramento, CA 94273-0001.



Advanced Highway Maintenance and Construction Technology Research Center

Department of Mechanical and Aerospace Engineering
University of California at Davis

Public Safety Power Shutdown (PSPS) Hydrogen Fuel Cell Mitigation Pilot

Dave Torick &
Shima Nazari: Principal Investigator

Report Number: CA24-4025
AHMCT Research Report: UCD-ARR-24-05-08-01
Final Report of Contract: 65A0749 Task 4025

June 5, 2024

California Department of Transportation

Division of Research, Innovation and System Information

Executive Summary

This report focuses on the attempted evaluation of the Western Systems (WS) HyMax system. The HyMax system is a hydrogen fuel cell (HFC) that is packaged with a modified 332 roadside cabinet. The 332 cabinet is commonly deployed by California Department of Transportation (Caltrans) for various uses, such as traffic light control or changeable message sign controllers. This evaluation hoped to install four new systems in remote locations typically impacted by public safety power shutoffs (PSPS) and document their installation and performance. However, due to performance issues with the HyMax system, the research project was modified. This report documents the design of the HFC, attempted procurement, HFC testing results, and site preparation. Also in the report is a rebuttal from WS, objecting the finding of this research. The results in this report are based on the first HyMax system that was produced by WS; it may not have been representative of the current production level HyMax system. WS has installed multiple HyMax systems in California and other states, and the performance of these units over time can be an indicator of the technology readiness for adoption by Caltrans.

Problem, Need, and Purpose of Research

California, Oregon, Washington, and other western states continue to experience an increase in wildfire risk and longer wildfire seasons. The combination of dry conditions and high winds can cause trees and debris to contact energized lines, damage utility equipment, and cause wildfires. Utility providers may need to turn off power during severe weather to help prevent wildfires, which is called a PSPS. A PSPS has a large safety and operational impact on Caltrans, including outages to traffic signal equipped intersections, Intelligent Transportation Systems (ITS), and communication hubs. Portable generator sets have been added to some field sites to mitigate PSPS events. However, the portable generators must be refueled every few hours and need maintenance frequently; thus, they are man-power intensive. In addition, the use of portable generators is not sustainable and conflicts with the Caltrans goal to lead climate change. California AB 1346 [1] eliminates the sale of small gas-powered engines used by portable generators by January 1, 2024 or a future date determined by California Air Resources Board (CARB).

Caltrans needs to find an alternate source of power that is both reliable and cost effective to solve PSPS outage issues. HFC power backup systems were identified as a potential backup power source. Caltrans needed to understand how well HFCs operate at various field sites and conditions to determine if HFCs

are a reliable power solution for PSPS events so that Caltrans can move forward with future HFC installations. The results provided by the team will help Caltrans determine if HFC backup systems are an acceptable solution to the PSPS outage issue.

Overview of the Work and Methodology

The Advanced Highway Maintenance and Construction Technology Research Center (AHMCT) in cooperation with the project panel planned to procure, install, operate, and evaluate existing and new a HFC power backup system. Due to issues during the procurement phase, the project panel agreed to change the direction of the project. The new methodology included site visits to existing HFC installations (a Caltrans owned system in District 11 and an El Dorado County system), operation of a new HFC in a laboratory setting, and site planning for potential installation of HFCs. HFC operations were observed and recorded, and the results are reported in this document.

The change to project scope was the result of multiple project panel and supplier meetings. The project panel and WS worked through many concerns and had a strong problem-solving relationship throughout the project. The decision to terminate active research was based upon the system's performance, impending construction suspension due to winter conditions at the installation sites, and the conclusion of the research task.

Major Results and Recommendations

Although HFC technology and the current design by WS should be able to deliver many days of PSPS alternative power, the system did not meet the reliability expectations outlined by the project panel. WS delivered two different HFCs for testing, and neither unit was able to run for more than several hours without needing to be reset due to alarms that were triggered. The active research tasks ended abruptly when the second unit was unable to restart. It is recommended that Caltrans and AHMCT remain apprised of current and new HFC offerings to determine when the technology is ready for deployment by Caltrans.

WS has reviewed this report, and the resulting correspondences are shown in Appendix A. There are HFC systems in California which belong to counties and municipalities that can be monitored and visited to determine the impact of the changes that WS made over the last year to address issues that were realized and reported in this project. There are significant benefits to this technology for back-up power during PSPS events, and observations and assessments of the installed HyMax systems may show different performance than what is shown in this report.

Table of Contents

Executive Summary	ii
Problem, Need, and Purpose of Research	ii
Overview of the Work and Methodology	iii
Major Results and Recommendations	iii
Table of Contents	iv
Figures	vi
Tables	vii
Acronyms and Abbreviations	viii
Acknowledgments	ix
Chapter 1: Introduction	1
Problem	1
Objectives	1
Scope	2
Background	3
Research Methodology	3
Overview of Research Results and Benefits	4
Chapter 2: HFC System Design	5
Basic HFC Overview	5
HyMax System	5
On-Site Installation Expectations	6
Foundation	6
Hydrogen Bottle Cabinet	8
HFC Cabinet	8
BBS Cabinet	8
Chapter 3: System Procurement	10
Supplier Issues	10
Design Concerns	10
Performance Issues	13
Chapter 4: Hydrogen Fuel Cell Test Results	15
Field Test	15
District 11 Site Information	18
El Dorado County Site Information	18
Altery System Performance	19
Laboratory Testing on HyMax System	21

Chapter 5: Deployment and Implementation	23
Problems and Issues that Affected Product Deployment	23
Issues Expected to Affect Full Implementation	23
Other Considerations for Reaching Full Product Deployment	24
District 2 Site Preparation	25
Chapter 6: Conclusions and Future Research	28
References	30
Appendix A: Western Systems Rebuttal Letter on This Report and the Authors' Response	31
Appendix B: METS EQASI HyMax Report	120

Figures

Figure 2.1 Foundation Drawing	7
Figure 3.1: Bottom Plate of Hydrogen Bottle Storage Cabinet	11
Figure 3.2: Detail of final BBS Cabinet that is part of HyMax System	12
Figure 4.1: HFC Location in District 11	16
Figure 4.2: HFC Location in El Dorado County Jurisdiction (District 3)	17
Figure 4.3: Altergy Power Output for the First 60 Minutes of Operations	20
Figure 4.4: Altergy Power Output at 1 Second Intervals	21
Figure 5.1: HFC Cabinet Air Outlet	24
Figure 5.2: Construction Photograph of the Foundation Form for the HyMax System	26
Figure 5.3: Photograph of Completed Foundation for the HyMax System	27

Tables

Table 1.1: Issues and Resolution Status of research Project _____	2
Table 4.1: Environmental Conditions for D11 Site Visit _____	18
Table 4.2: Environmental Conditions for El Dorado County Site Visit _____	19
Table 4.3: HyMax System Performance- 2 Hour Tests _____	22

Acronyms and Abbreviations

Acronym	Definition
AHMCT	Advanced Highway Maintenance and Construction Technology Research Center
BBS	Battery Back-up System
Caltrans	California Department of Transportation
DOT	Department of Transportation
DRISI	Caltrans Division of Research, Innovation and System Information
H ₂	Hydrogen
HFC	Hydrogen Fuel Cell
ITS	Intelligent Transportation Systems
K-Bottle	A standardized pressure vessel used for high-pressure industrial applications
METS EQASI	Materials Engineering & Testing Services Electrical Quality Assurance & Source Inspection
NFPA	National Fire Protection Association
NPEP	New Product Evaluation Program
PEM	Proton Exchange Membrane
PSI	Pounds per Square Inch
WS	Western Systems

Acknowledgments

The authors thank the California Department of Transportation (Caltrans) for their support, particularly Sean Campbell with the Division of Research, Innovation and System Information. His years of experience, guidance, and problem-solving were critical in this research endeavor. The authors also wish to acknowledge Jeremiah Pearce and the engineering staff he works with in District 2 for their feedback and time commitment to help ensure we sourced a system that would work for Caltrans. Dean Campbell in District 3 and the engineering staff that worked with him on this project also provided insights that improved this research task.

Additionally, the staff at Materials Engineering & Testing Services Electrical Quality Assurance & Source Inspection (METS EQASI), Justin Ellis, Sean Shackelford, and Patrick Meyer provided expertise, determination, and testing that were critical in this project.

The Office of Transportation Architecture within the Office of the State Fire Marshall, especially Reece Miller, provided guidance and assistance in understanding applicable codes and site plan requirements for roadside installations of an HFC system.

Finally, the authors acknowledge the dedicated efforts of the AHMCT team who have made this work possible.

Chapter 1:

Introduction

Problem

California, Oregon, Washington, and other western states continue to experience an increase in wildfire risk and longer wildfire seasons. The combination of dry conditions and high winds can cause trees and debris to contact energized lines, damage utility equipment, and cause wildfires. Utility providers may need to turn off power during severe weather to help prevent wildfires. This is called a Public Safety Power Shutoff (PSPS). PSPS have a large safety and operational impact on the California Department of Transportation (Caltrans), including outages to traffic signal equipped intersections, Intelligent Transportation Systems (ITS), and communication hubs. Portable generator sets have been added to some field sites to mitigate PSPS events. However, the portable generators must be refueled every few hours and need maintenance frequently; thus, they are man-power intensive. In addition, the use of portable generators is not sustainable and conflicts with the Caltrans goal to lead climate change. California AB 1346 eliminates the sale of small gas-powered engines used by portable generators by January 1, 2024, or a future date determined by California Air Resources Board (CARB).

Objectives

The goal of the research was to procure, install, and evaluate four hydrogen fuel cell (HFC) systems. An Advanced Highway Maintenance and Construction Technology Research Center (AHMCT) team traveled to existing HFC installations in California to record system performance. The project intended to support the installation of the four procured systems. Once the HFC systems were commissioned, the researchers planned to visit the sites through the remainder of the project to document system performance and maintenance requirements. The project was to then be documented into a final report that would be a resource for Caltrans as other HFC systems are deployed across the state. Unfortunately, after months of meetings, discussions, design changes, and effort by all parties, active research was terminated in September 2023 due to HFC durability and system performance issues discussed in the following section.

The initial intent of this research task was to purchase four HFC systems from WS, including an Altergy HFC. However, after three months into the project, WS

informed the project panel that Altergy had gone out of business, and they were working on finding a new supplier. WS was able to find a new supplier, add additional staff to the WS team with HFC expertise, and design a new system around the Plug Power HFC, the HyMax System. Through WS's quick actions, the project proceeded until the research task was ultimately terminated after months of meetings, design changes, and support visits.

Scope

At the beginning of the project, AHMCT worked to finalize a quote with WS, the only known supplier of a HFC system ready for roadside deployment. After four months, the first quote was delivered, and after a round of revisions a purchase order was created seven months later. Over the next 11 months, WS and the project panel addressed multiple design, performance, and safety concerns. However, in September 2023, active research was terminated due to the HyMax system being unable to restart after a manual shutdown. Table 1.1 is a summary of the concerns and issues that occurred throughout the research project. This decision was deliberated by the project panel for several days after the September 12, 2023 meeting. Ultimately, the project panel agreed to terminate active research and cancel the purchase order.

Table 1.1: Issues and Resolution Status of research Project

Issue	Status
Maintenance unable to access cables if required	Resolved: Initially as a design change with a thicker plate and a slot for access. Final solution was a removable battery shelf and the conduit penetration under the BBS cabinet.
Conductors in the H ₂ storage cabinet	Resolved: Redesign of system to always include a BBS cabinet that is mounted onto the foundation, the conductors enter the HyMax system through the bottom of the BBS cabinet, not the H ₂ storage cabinet.
HyMax System unable to start	Resolved: New Plug Power HFC provided.

Issue	Status
H ₂ Leak detection errors	Unresolved: Multiple site visits with some improvements, however, leak errors persisted
Hymax system would not restart	Unresolved: Unit would not power on after a simulated maintenance operations at the test lab and was returned to WS.

Background

HFCs, in conjunction with batteries, have been studied for nearly 15 years [2]. These systems have been utilized for numerous operations, including cellular towers and railroad crossings, to supply power when the electrical grid cannot. However, research into their application to support ITS infrastructure is just beginning.

Applications of proton exchange membrane (PEM) fuel cells span diverse domains, encompassing transportation, exemplified by hydrogen-powered vehicles, as well as stationary power generation, including backup power systems for critical infrastructure and residential electricity generation [3], [4]. The low-temperature operation of the technology aligns with contemporary pursuits in sustainable energy solutions. PEM HFCs may offer a clean and efficient alternative to conventional combustion-based energy systems and contribute to the mitigation of greenhouse gas emissions [2].

WS developed the HyMax system as a potential use for PEM HFC technology to be used as part of the battery back-up systems in the event of a PSPS.

Research Methodology

The planned tasks of this research task were to:

- Procure four commercially available HFC systems
- Document the installation of the HFC systems
- Field test the systems under actual Caltrans operating conditions
- Document the operation aspects of the HFC system including:
 - Reliability of providing continuous power

- Time to start
- Ability to maintain HFC temperature in prescribed limits
- Performance over time
- Document the maintenance and refueling procedures
- Document the cost of procurement and operations

Overview of Research Results and Benefits

The key deliverables of this project included:

- Developed purchase order for four HFC systems that was eventually cancelled
- Documented the design and system changes necessary to reach a viable HFC system for Caltrans
- Documented the field testing of previously installed HFC systems, a Caltrans owned system in District 11 and an El Dorado county owned system
- Partnered with Materials Engineering & Testing Services Electrical Quality Assurance & Source Inspection (METS EQASI) to perform laboratory testing of a HyMax HFC system
- Documented the National Fire Protection Association (NFPA) codes necessary for HFC deployment
- Documented site preparation for the HyMax system

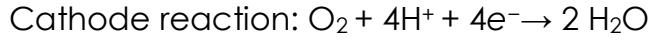
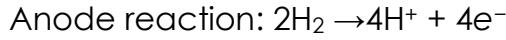
Chapter 2:

HFC System Design

Basic HFC Overview

This research task evaluated an HFC system that was designed to support ITS infrastructure on the roadside. Both the Altergy HFC and the Plug Power HFC utilized PEM fuel cells. These cells operate on the principle of the electrochemical reaction between molecular hydrogen and oxygen, mediated by a proton exchange membrane composed of a thin, proton-conductive polymer electrolyte. The membrane acts as a separator between the anode and cathode compartments within the fuel cell.

At the anode, molecular hydrogen (H_2) is supplied and undergoes catalytic oxidation to yield protons (H^+) and electrons (e^-). The electrons traverse an external electrical circuit, thereby generating an electric current. Simultaneously, the protons permeate the proton exchange membrane, traversing to the cathode compartment. The chemical reactions that occur at the anode and cathode sides are:



On the cathode side, molecular oxygen (O_2) is introduced, and protons and electrons recombine, facilitated by a cathode catalyst typically comprised of precious metals, such as platinum. This recombination results in the formation of water (H_2O) as the primary reaction byproduct.

The distinct feature of PEM fuel cells lies in their operational characteristics at relatively low temperatures, typically between 60 to 80 degrees Celsius (140 to 176 degrees Fahrenheit). This attribute affords advantages such as rapid start-up times and heightened energy conversion efficiency, both of which are key requirements to support battery back-up system (BBS) operations during a PSPS. Caltrans seeks a solution for PSPS situations that is low-maintenance and efficient, thus decreasing the need for H_2 refueling and maintenance visits. WS specified that only yearly maintenance on the filters is required for the HFCs.

HyMax System

The HyMax System that is offered by WS includes the following:

1. An H_2 bottle storage cabinet (modified 332 stretch cabinet)

2. A piggy-back-HFC cabinet (unique cabinet design)
3. A BBS piggy-back cabinet (modified)

On-Site Installation Expectations

The HyMax System that is offered by WS is formed from a build-on-site set of components. Each cabinet is fabricated and partially assembled by WS at their facility before being shipped. It is currently WS's expectation that the receiving party, Caltrans, would hire a contractor to land the H₂ bottle cabinet, mount the BBS cabinet, and then mount the HFC cabinet. Once the components are assembled, the contractor would then complete the wiring between the components and also complete the H₂ plumbing between the low-pressure regulator in the bottle cabinet and the HFC. WS does have a line item in their quote for commissioning, which involves a trained technician being on-site during the assembly process and also verifying that there are no H₂ leaks.

Upon assembly of the HyMax System on-site, Caltrans would then connect their power and communications cables as required. It should be noted that this on-site expectation does not allow for any quality assurance from WS of the system as a whole. The HyMax System will be powered on and utilized for the first time in the field. Chapters 3 and 4 discuss the issues associated with the HyMax System that was delivered to Caltrans.

Foundation

The HyMax System is based on the foundation for a 332LS cabinet with a LX-BBS from the 2022 Standard Plan ES-3C. This plan allows for a concrete pad large enough for a worker to be able to open the front door of the 332 cabinet and still be able to stand on the pad. However, since the H₂ bottle cabinet has doors on both sides, and the bottles are heavy, the plan was modified to have a larger pad to allow both doors to be opened thereby still allowing a worker to walk on the pad.

Another modification that was made to the plan was related to the conduit area and the anchors for the BBS cabinet. The conduit area was moved to the BBS area to ensure that the cables can be pulled or replaced without the need to remove the bottles. National fire codes stipulate that only control wires can be inside of the H₂ bottle cabinet. To accommodate the conduit area in the BBS cabinet, the anchors are spaced slightly further apart at 18 inches instead of 10 inches. Figure 2.1 is the foundation drawing necessary to place a WS HyMax system.

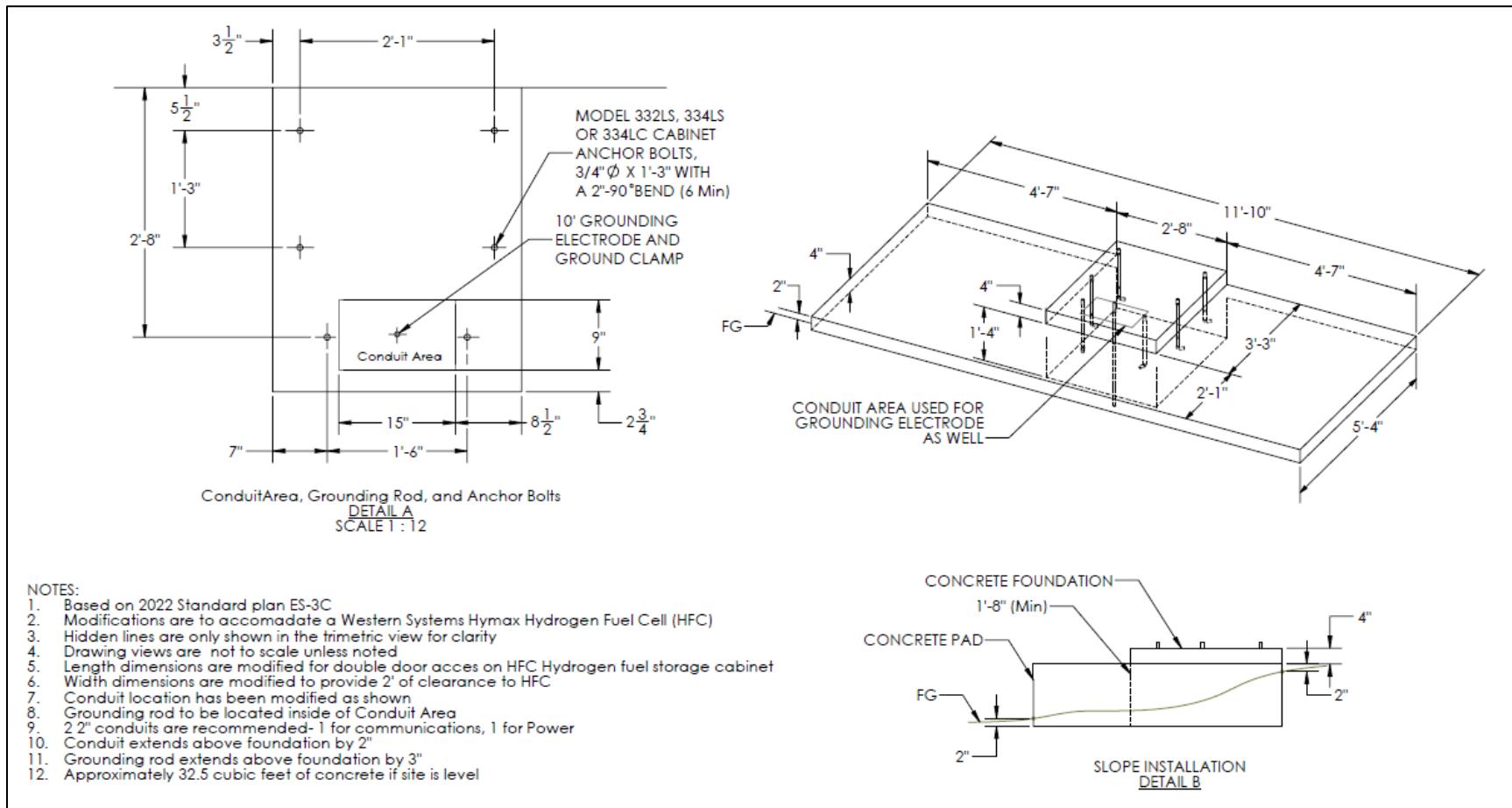


Figure 2.1 Foundation Drawing

Hydrogen Bottle Cabinet

The H₂ bottle cabinet is a 332-stretch cabinet that has had all of the internal framing removed. It houses six K-Bottles that are used to store H₂ gas, the maximum pressure is recommended to be 2400 PSI, and each bottle has an internal volume of 49 liters. The maximum amount of H₂ on site is under nine pounds of H₂ gas. The bottles are placed inside the cabinet and secured with fabric tie-down straps. All six bottles are connected to a high-pressure manifold before they pass through a shut-off valve located inside the cabinet. After the shut-off valve, the gas travels through a high-pressure regulator and then a low-pressure regulator to reach an output pressure from the cabinet to the HFC of between 8 to 12 PSI. There is an easy fill adapter that is located on the exterior of the cabinet inside a locked panel to allow for refilling of the bottles to occur without opening the H₂ bottle cabinet.

Each K-Bottle weighs 140 pounds, making it advantageous to not have to move the bottles for refilling or maintenance. The cabinet is designed with doors on both sides to allow more efficient bottle installation. A redesign was required by WS to ensure that the K-Bottles did not have to be moved once they were placed. The redesign brought the conduit penetration outside of the bottle cabinet, and the motivation and design change are further discussed in Chapter 3.

HFC Cabinet

The HFC cabinet is mounted piggy-back onto the H₂ bottle cabinet and rests on top of the BBS cabinet. The BBS cabinet would be installed before the HFC cabinet in the field. The HFC cabinet houses the HFC and has air intake at the top of the cabinet where there is an overhang over the door and an exhaust port on the bottom.

The HFC cabinet is unique in that it is delivered with the HFC inside. It is a heavy unit for two people to handle without equipment such as a boom truck.

BBS Cabinet

The BBS cabinet is wider than a typical BBS cabinet to match the width of the HFC cabinet that is placed on top of it. This cabinet also has a removable bottom battery shelf, which allows easy access to pull new cables if needed. This cabinet would be used regardless of if there is already a BBS cabinet on-site, as it allows for connections to the HyMax system for Caltrans and allows the conduit to enter the HyMax system from the foundation. The HyMax system design for other customers requires external conduit on the H₂ bottle cabinet; however, this was unacceptable to the project panel. Therefore, the BBS cabinet is always required to eliminate the need for external conduits on the HyMax system for Caltrans.

To satisfy the project panels concerns additional items were required in the BBS cabinet:

1. Surface mount box for RJ-45 connection
2. Terminal strip for dry relay contacts
3. Terminal strip for conductors
4. Loom to allow both conductors and communication cables to travel through the same conduit

The added components were necessary to create a clean delineation of where Caltrans' wiring would stop and the HyMax system wiring would begin. This delineation was necessary since the HyMax system wiring inside of the cabinet might not follow typical Caltrans standards. Both communication and power cables run through the same conduit to reach the HFC. The Caltrans standard is to run power and communication cables in different conduits. In the National Electric Code (NECSection 725.136) an exception is provided when a loom or some other method of ensuring a quarter inch air gap is provided.

Chapter 3:

System Procurement

Although HFC BBS systems have been installed and operational at roadside installations to support traffic lights within California for several years, procurement proved to be a significant challenge during this project. Throughout this research task, we encountered supplier issues, design issues, and performance issues during the procurement phase, leading to an eventual cancellation of the purchase order.

Supplier Issues

During the spring of 2021, WS invited Caltrans staff to visit a HFC manufacturer that they had partnered with, Altergy Systems. Working together, Altergy and WS have put several HFC BBS systems into operation at traffic lights for both California State and county owned intersections.

In the spring of 2022, this research task began. AHMCT reached out to WS with a request for an updated quote for four installations as well as answers to some questions that arose during the kick-off meeting. There was a delay of several months in gaining a response from WS and an initial quote was not created until late August 2022.

In June 2022, WS informed AHMCT and Caltrans that Altergy Systems had gone out of business, and they were working to partner with a new HFC supplier, Plug Power. The WS supplier issue most likely led to the delay in their response to inquiries and quote generation.

Design Concerns

From July 2022 through September 2023, AHMCT, Caltrans, and WS addressed multiple concerns related to design and performance. WS was the system integrator of the Plug Power HFC to be used in conjunction with a BBS. Their initial cabinet design and plumbing was a maintenance concern for the project panel. The initial design had a solid plate in the H₂ storage cabinet, a stretch Model 332 cabinet, on which the H₂ bottles would be seated. Under this plate, the conduits for the conductors and communication/control cables would enter from the foundation. The initial design only had a 3-inch clearance. The project panel was concerned that this clearance would not allow new cables to be pulled if there was an issue with the conductors. WS redesigned the base plate and added an oval slot and thickened the plate to allow better access to the conduit for maintenance. Their new design is shown in Figure 3.1.

This image also shows the mounting holes which were designed to match the existing Standard Plans from Caltrans for a 332 cabinet.

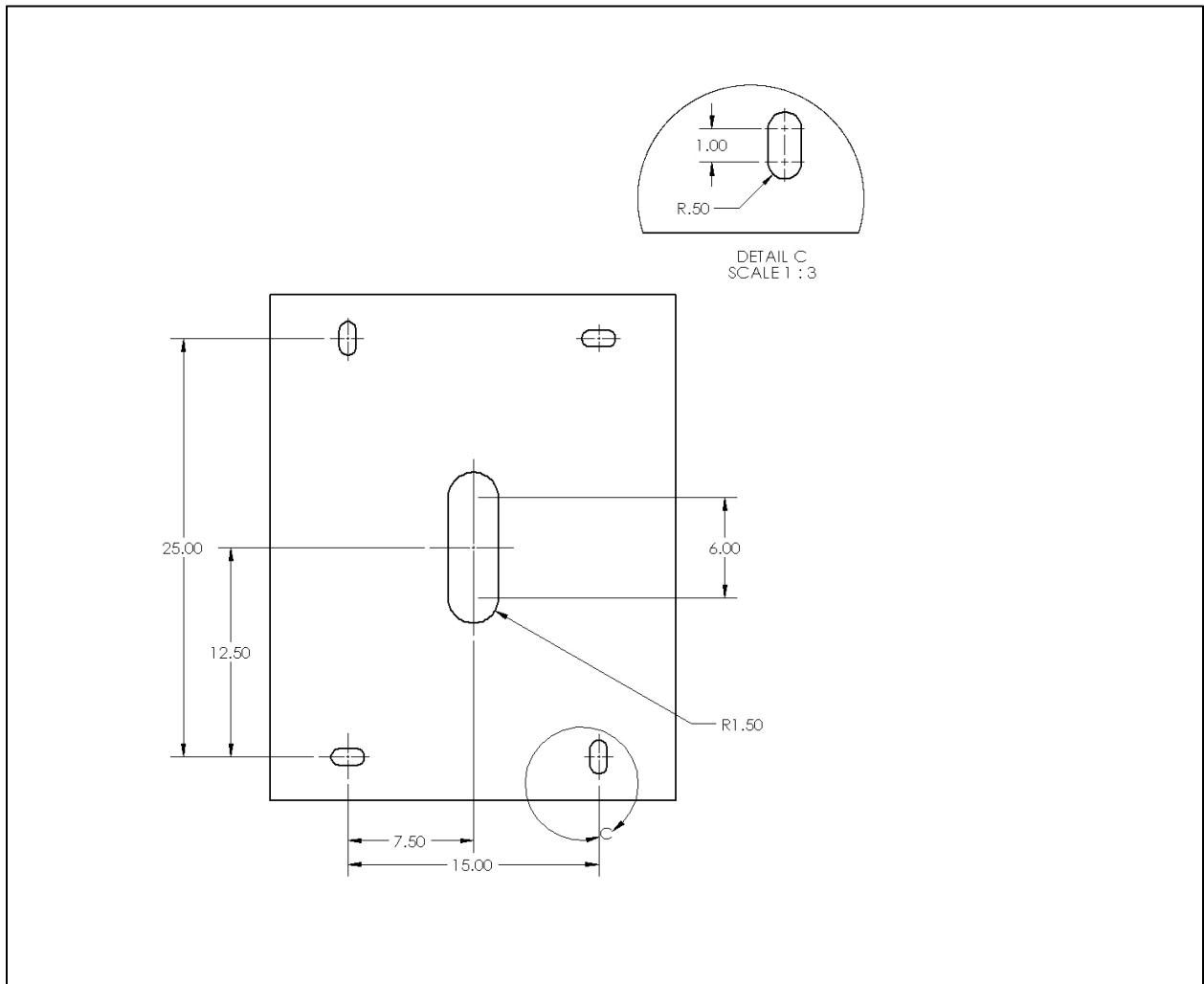


Figure 3.1: Bottom Plate of Hydrogen Bottle Storage Cabinet

Prior to a meeting with WS in February 2023, the need for a significant design change was decided by WS. This change was required after WS became aware that conductors could not be in the same internal volume as the H₂ bottle storage area. In order for WS to meet code requirements, they could not have an opening in the bottom plate as shown in Figure 3.1. The opening that Caltrans required for pulling new cables would not provide a sufficient separation between the conductors and the H₂ bottle storage area. WS's initial solution to address this new issue was to have a solid plate on the bottom of the cabinet under the bottles to separate the conductor entrance from the conduit in the foundation into the H₂ bottle storage volume inside the cabinet. The cables would then bend horizontally and leave the cabinet through a gland and run externally through conduit on the outside of the cabinet and then connect to the HFC cabinet. This redesign was not approved by the project

panel due to maintenance issues. If new conductors must be run, the bottles would need to be disconnected and removed to remove the plate. There were also aesthetic concerns about the external conduit.

After two months of discussion between WS and AHMCT, a solution that was mutually acceptable for all parties was created. The new design required the addition of a BBS cabinet that would be mounted onto the footer. The bottom of the BBS cabinet would have a large opening to allow the grounding rod, and two 2-inch conduits to penetrate the cabinet. This BBS cabinet would be part of the HyMax system if there was an existing BBS or if the BBS was to be supplied with the system. Through the addition of a cabinet mounted on the footer, the project panel was satisfied with the aesthetics and the ability to pull new cables if necessary. Figure 3.2 shows the opening in the BBS cabinet provided to WS for the HyMax system.

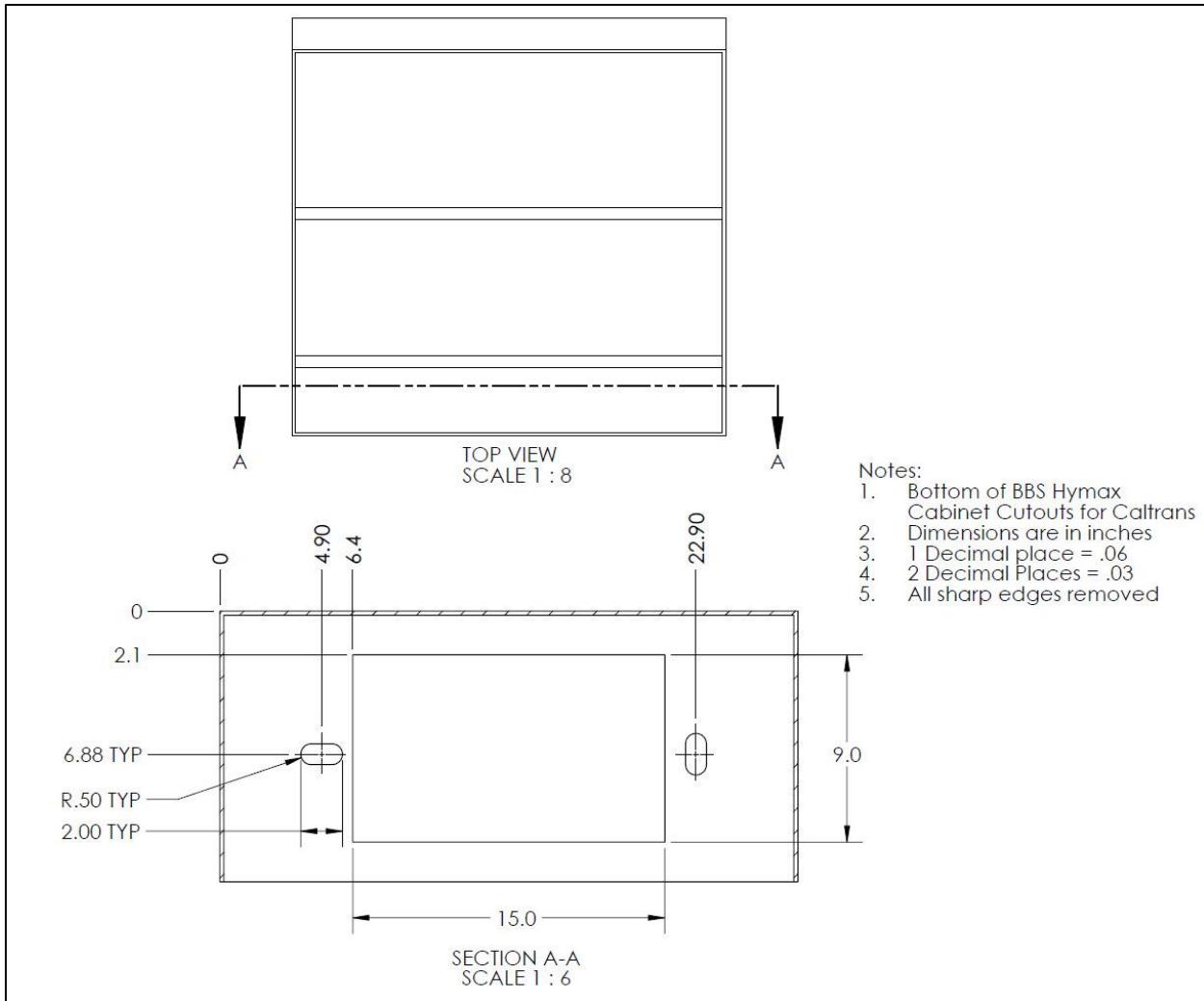


Figure 3.2: Detail of final BBS Cabinet that is part of HyMax System

Caltrans expected the HyMax system to be a drop-in-place product that would not require workers to assemble or wire cabinets or components that were part of the HyMax System. The design suggested by WS lacked a clear differentiation between WS and Caltrans responsibility in terms of assembly and wiring. In order to allow for connections from Caltrans wiring to the HyMax system, it was decided that several more components would be mounted to the back of the BBS cabinet, which would allow WS or their contractor the ability to wire the HyMax to a specific location, and then Caltrans would then take responsibility for assembling their components in that location. The connections and components are listed below:

1. Dry contacts from the existing BBS on site through a terminal strip. If WS is supplying the BBS, then this component is not included in the system.
2. Network communication through a RJ 45 surface mount box.
3. Conductors through a terminal strip.

Performance Issues

During December 2022, METS EQASI, AHMCT and Division of Research, Innovation and System Information (DRISI) worked with WS to change the initial delivery of the first HyMax unit to the Translab in Sacramento before delivery to Districts 2 and 3 for installation. One responsibility of METS EQASI is to test and evaluate new products through the New Product Evaluation Program (NPEP). In order to complete this evaluation, a supplier typically provides a unit for testing and evaluation to become approved. Through a good faith effort of all parties, it was determined that it would be mutually beneficial for the first HyMax system to be evaluated before commissioning it in the field.

The project panel intended for this first unit to be tested in a more controlled environment to determine its ability to meet Caltrans specifications before being delivered to District 2 for installation. However, as noted in the report in Appendix B from METS EQASI, there were significant issues during the evaluation which required the assessments to stop prematurely; thus, approval of the HyMax system on the NPEP list was not possible. The tests that were conducted are discussed in Chapter 4, but several issues included:

- The H₂ inlet line ferrule not properly seated, which caused a hydrogen leak and required a field adjustment to use a flexible hose.
- The low-pressure solenoid failed to open, which was determined to be caused by an issue with the Plug Power HFC. A new HFC was delivered as a replacement.

- Multiple error codes occurred during testing associated with a H₂ leak detection. This error was intermittent but occurred throughout the majority of start-ups. A solution was not found for this problem.
- The system would not restart on September 6, 2023, after simulating a complete disconnection from power and restart. The root cause of this problem has not been identified by WS at the time of this report.

After the system would not restart and a project summary meeting with all parties on September 12, 2023, AHMCT and Caltrans decided to cancel the purchase order, and active research concluded on the research project.

Chapter 4:

Hydrogen Fuel Cell Test Results

It is common for manufacturers to create a one- to two-page summary document of their products' performance. The summary data on these sheets are often based on test results or extrapolated from sub-system specifications. However, to ensure that Caltrans could make an informed decision about the feasibility and real-world performance of the HyMax system in several environments, AHMCT and METS EQASI performed experiments to determine the HFC performance.

Results that are shown below are from two different HFC manufacturers that WS has packaged into a roadside cabinet used by Caltrans and several other county Departments of Transportation (DOTs) in California. Due to the previously mentioned closure of Altergy, only field tests are available for the Altergy system. The Plug Power system was tested in a laboratory setting, and field tests did not occur due to the termination of active research after the second failed WS HyMax system evaluated at the Translab.

Field Test

An AHMCT team traveled to two existing HFC installations in California. Both of these systems utilized the no longer available Altergy HFC that is mounted to a 332 cabinet. On September 16, 2022, researchers visited the District 11 installation of a HFC at the Scripps Poway Parkway and Route 67 intersection (32.9546° latitude, -116.9692° longitude). Figure 4.1 is a satellite image of the site with the HFC location in the red circle. Then, on October 14, 2022, researchers visited a location in District 3 that is under the El Dorado County jurisdiction at Missouri Flats Road and Industrial Way (38.6985° latitude, -120.8232° longitude). Figure 4.2 is a satellite image of the site with the HFC location in the red circle. Since this site visit, the Altergy HFC has been moved to a different location.



Figure 4.1: HFC Location in District 11



Figure 4.2: HFC Location in El Dorado County Jurisdiction (District 3)

The humidity and temperature inside the cabinet, as well as in the exhaust from the HFC, was measured at both sites. A higher internal cabinet temperature was recorded at the District 11 site, most likely due to the time of day (morning) and the HFC being located on the eastward facing side of the cabinet, which exposed the HFC cabinet to direct sunlight. The El Dorado cabinet was placed on a northern facing cabinet. Although this test was also in the morning, the cabinet was in the shade. This information is shown in Tables 4.1 and 4.2 presented later in this chapter.

The actual hydrogen used during the field tests was unable to be recorded. In order to accurately measure the mass of hydrogen utilized, a mass sensor should be installed in line with the hydrogen supply. Since the researchers did not own this equipment, it was deemed unrealistic to modify the HFC system.

District 11 Site Information

The HFC installation location in District 11 is located at an elevation of approximately six feet above the adjacent roadways, which allowed the HFC to be installed without the need for concrete filled bollards. The load at the intersection is for the 23 LED traffic light signals and a traffic light controller. This site had 12 K-bottles of H₂ in a storage cabinet. The 12 K-bottles can store approximately 18 pounds of H₂ at 2,400 PSI. A K-bottle has a volume of 49 liters. The storage capacity of 12 bottles coupled with an operating HFC output of around 300 watts should provide approximately 19 days of uninterrupted back-up power to the traffic lights and controllers between hydrogen refilling.

The environmental conditions during which the site visit was conducted are shown in Table 4.1.

Table 4.1: Environmental Conditions for D11 Site Visit

Environmental Condition	Value
Temperature	67° Fahrenheit
Humidity	77%
UV Index	2.7
Wind	4 MPH (west northwest)
Pressure	29.92 mm mercury (steady)
Internal HFC Temperature	85° Fahrenheit
Exhaust HFC Temperature	80° Fahrenheit
Internal HFC Humidity	43%
Exhaust HFC Humidity	45%

El Dorado County Site Information

The HFC installation in El Dorado County was at the same elevation as the roadway and located close to the intersection as can be seen in Figure 4.2. With this close proximity to traffic, concrete-filled bollards were necessary to protect the installation from errant vehicles. The load at this intersection had 11 LED traffic light signals and a traffic light controller. This site had storage for six K-

bottles and the operating HFC output was around 250 watts. It is expected that 11 days of uninterrupted operations could occur between refueling.

The environmental conditions during the site visit are shown in Table 4.2.

Table 4.2: Environmental Conditions for El Dorado County Site Visit

Environmental Condition	Value
Temperature	72° Fahrenheit
Humidity	49%
UV Index	2.7
Wind	0 MPH
Pressure	29.82 mm mercury (steady)
Internal HFC Temperature	74° Fahrenheit
Exhaust HFC Temperature	91° Fahrenheit
Internal HFC Humidity	32%
Exhaust HFC Humidity	38%

Altery System Performance

The researchers worked with the local person-in-charge to simulate a PSPS. The shore power was turned off, which required the HFC system to supply power to the BBS, the traffic lights, and the controllers. At both locations, the Altery system properly energized, warmed up, and provided sufficient power to meet the intersections' needs. Figure 4.3 shows the output when the HFC fuel system begins to operate.

Due to start-up processes of the HFC technology, the required power for the intersection is not provided until five minutes after it starts, and the batteries are supplying power through the BBS. After five minutes, the power continues to increase as the HFC is required to power the intersection and provide power to the BBS to recharge the batteries. As the batteries approach a full charge, the output power decreases until the HFC supplies power only to the intersection.

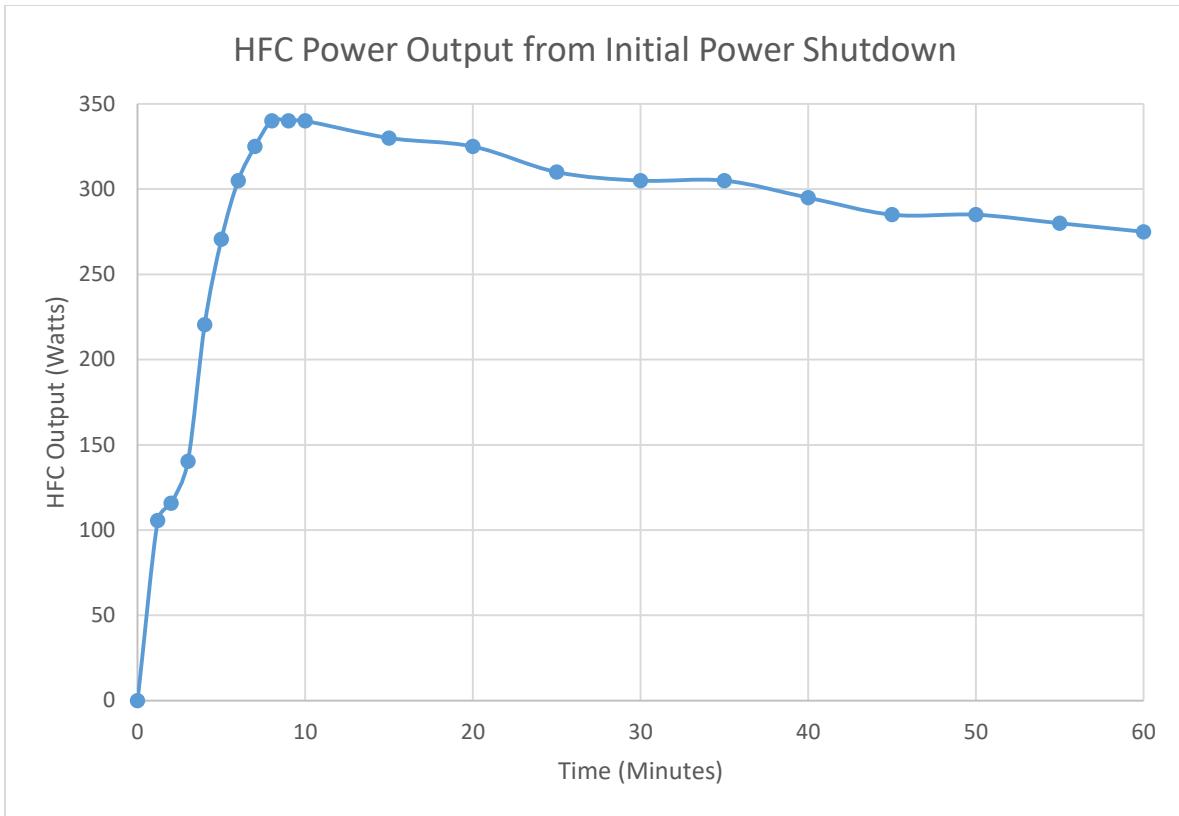


Figure 4.3: Altergy Power Output for the First 60 Minutes of Operation

Once the batteries have been fully charged, the HFC provides a relatively stable voltage that responds to the slight variations in power requirements for the intersection. Figure 4.4 shows the stable and slight variation of the power measurements recorded at 1-second intervals. The x-axis is in seconds compared to minutes in the previous figure. These data were recorded after the HFC output had stabilized and was only supplying power to the intersection.

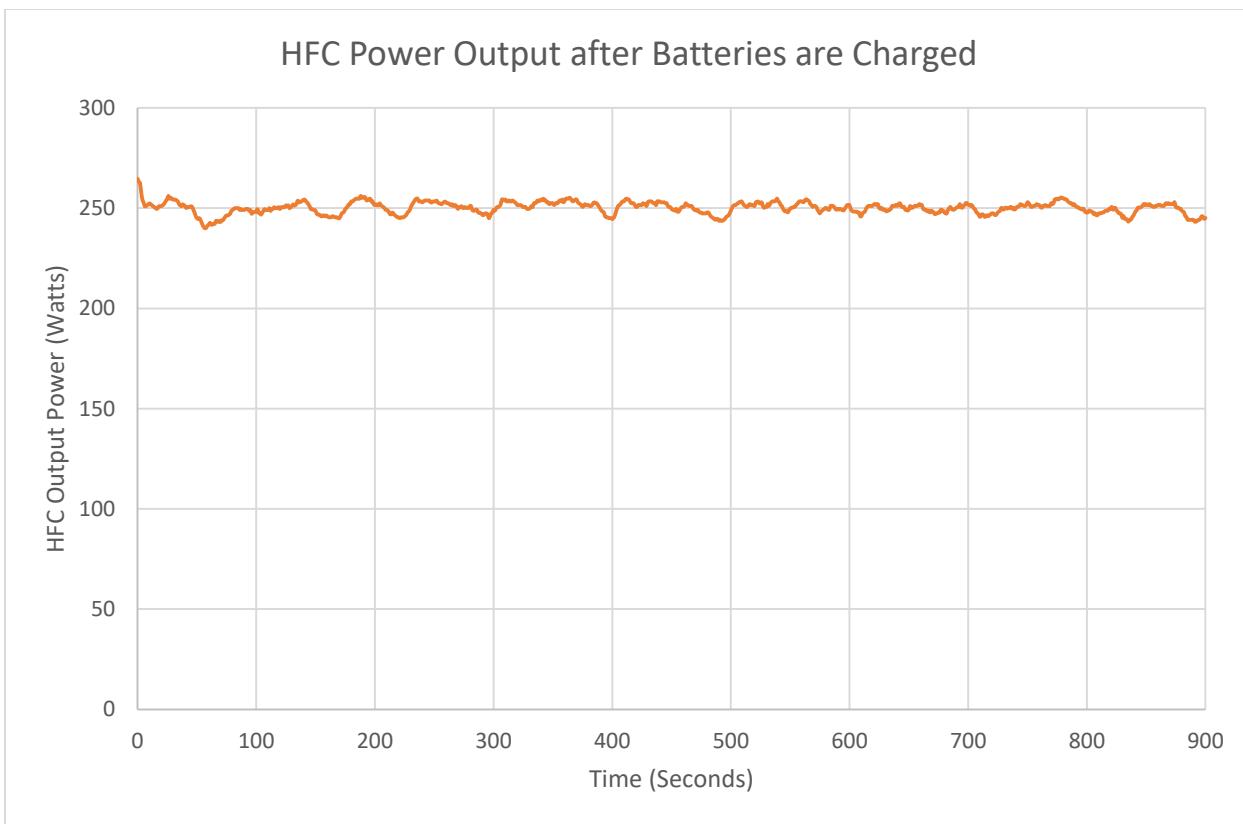


Figure 4.4: Altergy Power Output at 1 Second Intervals

The humidity and temperature inside the cabinet as well as the exhaust from the HFC were measured at both sites. As noted, a higher internal cabinet temperature was recorded at the District 11 site. This higher temperature was most likely due to the time of day (morning) and the HFC being located on an eastward face of the cabinet, exposing the HFC cabinet to direct sunlight. The El Dorado cabinet was placed on a northern facing cabinet, although this test was also in the morning, the cabinet was in the shade.

Laboratory Testing on HyMax System

Laboratory tests were conducted by the METS EQASI group at the Translab in Sacramento. AHMCT would like to thank them for their willingness and eagerness to assist in the testing of the WS HyMax system which utilized a Plug Power HFC. The staff were professional and diligent in working with WS to develop a safe testing protocol, and they were relentless in their efforts to try and complete the testing scenarios that were developed with AHMCT, the project panel, and METS EQASI. Unfortunately, the testing plan was not able to be completed due to several failures of the HFC. Full details of the testing performed on the HFC are shown in the report from METS EQASI in Appendix B.

Although the HyMax System was at TransLab from March 2023 through August 2024, only four tests were conducted due to issues with reliability and functionality that were described in Chapter 3. Further details of the issues are described in Appendix B. Table 4.3 summarizes the completed tests and system performance.

The power output varied more than what was recorded in the field trials. Without field trials of the HyMax System, it cannot be verified if these findings are typical operations for the Plug Power HFC utilized in the HyMax System or if the findings resulted from the laboratory setup. It should also be noted that we are unable to determine if the failures of the HyMax System were a result of WS's or their contractor's setup and commissioning or if the failures were due to the HFC. Furthermore, the reliability of the unit that was tested by METS EQASI appears different than the performance that WS claims for their field units installed in California. Independent evaluation of the HyMax Systems installed in California should be conducted to determine the reliability of the units in the field, which was beyond the scope of this research task. WS has been asked to provide factual data on these field installations. At the time of publication, these data have not been provided to the researchers.

Table 4.3: HyMax System Performance - 2 Hour Tests

Watt Load at HFC	Output Voltage (DC)	Current (DC)	Power Displayed by HFC
232 Watts	52.7 Volts	4.3 – 8.1 Amps	222 – 425 Watts
472 Watts	52.6 Volts	7.5 – 15.0 Amps	407 – 780 Watts
720 Watts	52.6 Volts	12.1 – 23.9 Amps	642 – 1258 Watts
952 Watts	52.6 Volts	16.6 – 31.0 Amps	857 – 1588 Watts

Chapter 5: Deployment and Implementation

The main objective of this research task was to deploy the HyMax system and monitor its performance for a year. Unfortunately, this task was not able to be accomplished due to several factors that will be discussed. There are currently a large number of HyMax systems that have been installed in San Joaquin County. Site visits and discussion with officials from the county may provide information that is different than what is in our report, as their units have been installed after several modifications that WS has made as a result of this research task.

Problems and Issues that Affected Product Deployment

There were several issues that impacted the procurement, testing, and potential deployment of the HyMax system. Throughout the project, WS and the project panel worked to address design changes, concerns related to NFPA codes, and other items. These have been discussed in detail in the previous chapters.

The main problem that prevented deployment was system performance. Throughout the laboratory testing, the HFC system encountered errors that did not allow it to operate for any substantial length of time without being reset. WS has been working to address these issues with improvements to manufacturing, design, and shipping. Full details of their improvements are shown in Appendix A. It is the project panel's position that further in-house testing of the system prior to shipping can increase the performance of the WS system, allowing issues to be addressed in the factory.

Issues Expected to Affect Full Implementation

The changes that WS had made to their processes and HyMax system were not able to be assessed due to the termination of active research on this task. An evaluation of HyMax systems that have been installed in the field for months or years should be conducted to verify the impact of the WS changes. The installation of a test-bench at the WS facilities would also allow WS to validate their ability to meet customer requirements. Some key requirements that should be validated before full implementation are:

- Verify long-term system performance. Start the test with full H₂ tanks and operate the system with a 400-Watt load until the H₂ bottles require refilling.
- Verify the system and the public are protected by the HyMax system safety features, such as:
 - Low H₂ pressure shutoff
 - H₂ leak detection
- Verify that ice-damming is not a concern on the outlet of the HFC cabinet; the outlet is shown in Figure 5.1.



Figure 5.1: HFC Cabinet Air Outlet

Other Considerations for Reaching Full Product Deployment

Another area that will require further investigation is the adherence of the supplier and the site plan from Caltrans to meet NFPA codes. Below is a summary of some of the codes that should be examined and applied in order to meet requirements from the state fire marshal.

Vehicle impact protection is required due to the proposed volume of H₂ at an installation location. This protection can be accomplished by locating the HyMax system outside of the path of an errant vehicle, appropriately spaced bollards, or a guardrail. Protection should be considered by the Caltrans district during site planning.

There is not a need for a fire access lane to the HyMax system. The system is a single cabinet with piggy-back cabinets attached to it that are not in a housed structure. If the HyMax system was to be placed inside of a structure or small building, a fire access lane would be required. NFPA 853[5] provides information related to fire department access requirements.

NFPA 2[6], Hydrogen Technologies Code, needs to be followed. This code provides requirements for the HFC system. The HyMax system appears to meet CFC 1206 and CSA FC 1 requirements based upon a preliminary assessment from the state fire marshal's Office of Transportation Architecture. There are several requirements that are within this code, including the documentation of a fire-risk evaluation prepared by a registered engineer or an acceptable third-party. Chapter 12 in this code specifically details HFC power systems.

NFPA 853, Standard for the Installation of Stationary Fuel Cell Power Systems, should also be referenced during deployment. Chapter 5 provides details related to site planning and requirements. Awareness of the HFC location related to hazards, buildings, and the environment are all discussed in this chapter.

District 2 Site Preparation

District 2 constructed an HFC foundation at the Bella Vista traffic signal and the Lassen Park CCTV locations per the specifications provided by AHMCT. District 2 ran power and communications conduits between existing pull boxes and the HFC foundation. The conduits were stubbed above the HFC foundation for future HFC installation. The infrastructure installation was funded by District SHOPP Minor funds as a "Day-Labor" project using Caltrans Maintenance personnel to perform the work.

Figure 5.2 is a photograph of the form for the foundation of the HyMax system installation. The area was then backfilled and filled with concrete.



Figure 5.2: Construction Photograph of the Foundation Form for the HyMax System

Figure 5.3 is the finished foundation at Lassen Park ready for the HyMax system installation.



Figure 5.3: Photograph of Completed Foundation for the HyMax System

Chapter 6:

Conclusions and Future Research

HFC systems have significant promise to provide power backup for ITS infrastructure during a PSPS. For a six K-bottle H₂ storage cabinet and a large intersection with 25 LED traffic lights, the calculated time between refilling events is over nine days, which is a significant improvement of the typical eight hours of run-time for a generator that runs on hydrocarbon fuel, such as gasoline or diesel. This technology could also decrease in greenhouse gas emissions, and this benefit is further increased if the H₂ is sourced from a supplier who does not split methane to create H₂. It should be noted that gasoline and diesel generators are being phased out by Caltrans through limitations on new purchases. Even though the AB-1346¹ full ban on the sale of new gasoline or diesel generators does not start until 2028, many generators are already unavailable in California. A solution for PSPS events is required that does not involve the afore-mentioned generators.

The HyMax system was capable of meeting the load requirements for a typical intersection. The vendor has had multiple deployments in several counties within California and claims that these HyMax systems are properly functioning. It is recommended that these installations be monitored over the next year, and site visits as well as interviews be conducted with the person-in-charge of maintenance on the HyMax systems. Through further due diligence and performance of the HyMax system at current installation areas, Caltrans may find that WS adjustments in design, testing, and shipping have significantly improved the HyMax system.

The current HyMax system is not a turnkey solution. It requires assembly on site by a contractor before Caltrans can connect power and communication wires to the HyMax System and commissioning can occur. It is the project panel's opinion that quality assurance may be improved if a drop-in HFC turnkey product is delivered that has been tested before shipping.

Through our research task, we found that the HyMax system was able to meet the load requirements of the locations in which we had planned to install the units. However, as mentioned before, we were unable to prove that the system meets the dependability requirements for installation in the field. It is recommended that the new systems be operated by the supplier for an extended period of time and multiple start-up events to ensure that the systems meet Caltrans' expectations before shipment. As new technology is adopted by Caltrans and its maintenance staff, confidence in the technology's durability

is paramount. A full system testing before shipment is likely to increase the system's performance.

The HFC produced by Plug Power and utilized in the HyMax system has an operating temperature limit of 122°F. Throughout California, there are regions that may exceed this temperature, especially if the HFC is exposed to direct sunlight. In our field testing of existing Altergy HFC systems, we found that the cabinet temperature was elevated if the HFC was not on the north side of the H₂ bottle cabinet. It is recommended that in areas with high temperatures, care is taken in site planning to insure the HFC cabinet is in the shade on the north face of the H₂ bottle cabinet.

Protection of the HFC system from errant vehicles is a requirement of NFPA 2. Through our research, we have seen various approaches, such as being located on a slope six feet above the roadway and bollards, used to protect the HFC system. Guardrails are an acceptable option and may also be considered.

An additional site planning consideration for effective deployment is snow level. The current HyMax system has an air inlet at the top of the HFC cabinet, which is just under six feet above the foundation. Snow depth should be considered in areas with high snowfall to make sure the air intakes are not covered. The manufacturers claim that the internal heaters for the exhaust will allow the HFC to operate even if snow has covered the exhaust vents which are located approximately two and a half feet above the foundation.

Finally, future research on HFC systems to support PSPS events and maintain traffic signals at intersections needs to continue. Observations and evaluations of current systems, such as WS HyMax system, should continue. The HFC technology was able to meet power needs, and future research focused on durability and dependability of HFC systems should occur to determine when the HFC systems offered by suppliers are ready for full deployment.

References

- [1] "Bill Text - AB-1346 Air pollution: small off-road engines." Accessed: Dec. 08, 2023. [Online]. Available: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1346
- [2] M. K. Singla, P. Nijhawan, and A. S. Oberoi, "Hydrogen fuel and fuel cell technology for cleaner future: a review," *Environ. Sci. Pollut. Res.*, vol. 28, no. 13, pp. 15607–15626, Apr. 2021, doi: 10.1007/s11356-020-12231-8.
- [3] R.-A. Felseghi, E. Carcadea, M. S. Raboaca, C. N. Trufin, and C. Filote, "Hydrogen Fuel Cell Technology for the Sustainable Future of Stationary Applications," *Energies*, vol. 12, no. 23, Art. no. 23, Jan. 2019, doi: 10.3390/en12234593.
- [4] A. G. Olabi, T. Wilberforce, and M. A. Abdelkareem, "Fuel cell application in the automotive industry and future perspective," *Energy*, vol. 214, p. 118955, Jan. 2021, doi: 10.1016/j.energy.2020.118955.
- [5] "NFPA 853 Standard Development." Accessed: Dec. 08, 2023. [Online]. Available: <https://www.nfpa.org/codes-and-standards/8/5/3/853>
- [6] "NFPA 2 Code Development." Accessed: Dec. 08, 2023. [Online]. Available: <https://www.nfpa.org/codes-and-standards/2/2>

Appendix A: Western Systems Rebuttal Letter on This Report and the Authors' Response

UC Davis gave Western Systems an opportunity to review this report in November 2023, and WS objected to the research findings and requested delay. On February 8, 2024, UC Davis provided WS with the 95% final report, a draft version of the METS EQASI report, and the testing procedure, and agreed to again delay submission of the final report to allow WS time to provide a substantive response, including information about WS's successful field tests of its technology. While WS did not provide information to contradict the research findings, UC Davis nonetheless includes WS's rebuttal letter response to the report as Appendix A. We have reviewed WS's rebuttal letter. None of their claims alter the conclusions of this report, and we have addressed most of their allegations in our response to their initial letter on February 8, which is attached at the end of this appendix.



April 9, 2024

VIA EMAIL:

snazari@ucdavis.edu
datorick@ucdavis.edu

Mr. Shima Narari
Mr. Dave Torick
AHMCT RESEARCH CENTER
UCD DEPT. OF MECHANICAL & AEROSPACE ENGINEERING
Davis, CA 95616-5294

David A. Lowe, Esq.
Direct Dial: 206.381.3303
Lowe@LoweGrahamJones.com

Re: Western Systems, Inc. HyMax™
UC Davis-Caltrans Report No. CA24-4025# (“Report”)
Our Reference: WESS-5-0001
Action Requested: Do Not Publish Flawed Report

Dear Messrs. Narari and Torick:

We represent Western Systems, Inc. (“Western”) in matters pertaining to its intellectual property, including related to its HyMax™ technology and product development and the above-referenced Report. This letter references the November 30, 2023 letter of Jeffrey H. Capeloto and Mr. Nazari’s December 5, 2023 email response, wherein UCD (1) refused to provide Western a reasonable opportunity to review and respond to the incomplete and erroneous testing procedure and conclusions set forth in the Report, and (2) offered to address concerns regarding unauthorized disclosure of Western’s confidential and proprietary information. This letter further references our December 15, 2023 letter and Mr. Nazari’s February 8, 2024 email response. In an effort to be complete and self-contained in this response, we restate as well as augments our December 15 letter, and provide further direct responses to Mr. Nazari’s most recent email.

While Western has been both forthcoming and specific about the nature of the incomplete and erroneous testing procedure and conclusions set forth in the Report, as well as the unreasonable timing of USD’s threatened publication, we provide background context and summarize those points below to ensure a clear understanding of Western’s position.

Altery Systems (Altery), a manufacturer of Proton Exchange Membrane (PEM) fuel cells for backup power, began operations in 2001. Altery designed, manufactured and sold a 5kW PEM fuel cell powered by compressed hydrogen gas for backup power applications. The initial market

Mr. Shima Narari

Mr. Dave Torick

April 9, 2024

Page - 2

segment was cell tower backup power for the wireless communications providers like MetroPCS, T-Mobile, etc. Over the years in order to address market demands, Altergy developed 1kW and 2.5kW fuel cells targeting specific markets including cable TV (CATV) backup power and traffic signal backup power for critical intersections, evacuation routes to avoid dark signal accidents, and fatalities by providing days of runtime during a utility outage. To help grow the traffic signal backup power market, Altergy signed a distribution agreement with Western in early 2021 to be its exclusive distributor of fuel cell systems for traffic signal backup power applications in Altergy's 8-state territory.

Initial discussions with Caltrans D2/D3 and UCD began in late 2021. On or about April 2022, a fuel cell introduction meeting was set-up with Caltrans and UCD to include Western and Altergy for a deep-dive into the fuel cell technology and its application for traffic signal backup. Altergy failed to attend and the meeting was postponed. At this point in time, Western was unaware that Altergy had let go most of the key staff and was preparing to go out of business, as it stopped answering calls and emails. During this time period, an Altergy factory tour was requested by Caltrans and UCD, which was never scheduled due to lack of communications or responses from Altergy. Follow-up technical fuel cell seminars were subsequently conducted in the July 2022 timeframe, when Western hired a former fuel cell sales manager from Altergy.

In late July 2022, Western informed Caltrans and UC Davis that Altergy was no longer in business and that Western had partnered with Plug Power as the fuel cell manufacturer. As explained to Caltrans and UCD, in terms of functionality, both fuel cell system types, Altergy (1kW net power) and Plug Power (1.1kW net power), provided the same modes of operations and were functionally equivalent in the traffic signal backup power application.

Western subsequently completed meetings and webinars with key Caltrans and UCD personnel in which it demonstrated the features and benefits of long duration runtime during utility outages due to Public Safety Planned Shutdowns (PSPS) events and other natural disasters. As a result, UCD, providing engineering support for Caltrans, decided to move forward with the project and selected four pilot locations in Northern CA (Sacramento & Redding) to field test the HyMax™ technology: three for traffic signal backup and one for remote CCTV node application. After Western and Caltrans agreed to modifications of 332S and NEMA cabinet designs, including new FIP port in the 332S, conduit routing for serviceability, hydrogen safety training, and confirmatory BOM over a period of four months, UCD issued the purchase order for four Western Systems HyMax™ fuel cell systems with the Plug Power 1.1kW fuel cell in late November 2022.

UCD witnessed deployed fuel cell sites at Caltrans D11 in Poway and El Dorado County (EDC) in Placerville, which demonstrated system functionality and performance using the Altergy design with non-traffic grade cabinets, as D11 and EDC were early adopters of the technology and eager to do pilot projects at these sites. As you are aware, all field tests were reported to have been successful. Nevertheless, while the Purchase Order was being processed, several additional

meetings involving Caltrans, UCS and Western occurred in which further design/scope changes were requested. Among the changes requested was that instead of performing field tests in a remote location in Redding, CA, initial Western HyMax™ (Plug Power) systems would be tested in a laboratory-controlled environment, to which Western agreed.

The lab test selected for the initial Plug Power system was the Materials Engineering & Testing Services (METS) lab in Sacramento, Caltrans headquarters. Notwithstanding that the cabinet design was still in flux awaiting Caltrans approval, Western was pressured to provide a fuel cell system for lab testing, else UCD threatened to cancel the contract. Nevertheless, Western provided the first integrated prototype HyMax™ (Plug Power) system to the METS lab in the summer of 2023. At that time UCD had in its possession HyMax™ engineering specifications, spec cut sheets, and a high-level test plan, which had been provided to Caltrans and UCD as earlier in advance of the METS lab receiving system hardware, so that UCD and the METS lab could develop setup/test plans/procedures to fully test the system functionality in its intended operating environment and application. Nevertheless, neither UCD nor Caltrans ever provided Western with any setup/test plans/procedures to ensure that a fair and proper evaluation of the HyMax™ was conducted.

Despite its clear failure to (1) document and apply a reasonable and scientifically based methodology to its evaluation procedure, (2) abide by the HyMax™ engineering specifications, spec cut sheets, and a high-level test plan provided to it in advance to avoid foreseeable faulty, unpredictable test results/failures, (3) involve Western to ensure system testing occurred within established parameters, (4) provide Western and its partners (including Plug Power) with a reasonable opportunity for review, comment and if warranted correction of any valid deficiencies, and (5) review and consider the 25 successful field installations of the technology, UCD nevertheless terminated the project and provided Western with a draft of its incomplete and flawed Report on November 27, 2023, demanding Western's rebuttal response a mere four (4) days later on December 1, 2023. Western provided a detailed response in its December 15 letter, along with supporting enclosures, despite not having a reasonable opportunity for it and its technology partners to review and respond to the conclusions of the Report, let alone address them through diligent technical modifications as may be needed. In that letter, Western documented many of the critical errors of the Report in the enclosed Preliminary Report Critique ("PRC"). While specific defects were addressed in the enclosed PRC, among the many Report defects identified were the following:

- UCD failed to specify setup/test plans/procedures to fully test the system functionality in its intended operating environment and application, including wire/plumbing to hydrogen storage.
- UCD failed to specify initial system set-up via internal GUI screens for modes of operation, set points for low fuel, set points for low voltage threshold, set points for dormancy refresh cycles, low fuel, out of fuel alarms, H2 leak alarm level, etc.

Mr. Shima Narari

Mr. Dave Torick

April 9, 2024

Page - 4

- UCD failed to confirm adherence to HyMax™ engineering specifications, spec cut sheets, and a high-level test plan provided by Western well in advance of Caltrans METS lab testing. This is demonstrated in part by the diagnostic logs from the Plug unit, enclosed, which the METs lab had in its possession for the testing and evaluation, which identifies the misuse of the equipment during testing procedures.
- UCD failed to disclose the system parameters and test conditions leading to what it called the “electrically catastrophic failure” that allegedly occurred.
- Despite claiming multiple performance issues, UCD failed to provide detailed documentation/information of what caused that failure or the operations conditions leading to the alleged failure.
- UCD failed to provide the technical qualifications for the individuals involved during each testing procedure.
- UCD fails to explain how it purports to have prepared the Report, yet Caltrans apparently performed HyMax™ testing. If that is the case, where is the contemporaneous supporting documentation from Caltrans, which has been requested by Western but not produced? UCD has failed to provide an opportunity for Western’s review Appendix D: METS EQASI QASI Hyrax Report.

The PRC has been updated in response to Mr. Narari’s February 8 email. While specific defects are addressed in the enclosed PRC, among the many Report defects identified are the following:

- Contrary to the assertion, Western was never provided with test procedure before or during the process from Caltrans METS or UC Davis.
- Western took care to ensure that alarm settings were configured appropriately to avoid unnecessary activations, such as setting the low fuel warning threshold too high to prevent false alarms. No technician from Western attempted to manipulate safety alarms, such as those for leaks, to prevent their activation. In fact, the graphical user interface (GUI) does not provide the capability to modify internal alarm settings of this nature.
- Contrary to the assertion, UCD failed to disclose the system parameters and test conditions at any time, including leading to what it called the “electrically catastrophic failure” that allegedly occurred.
- During the limited period in which Western was allowed to be present during testing, it observed a test conducted by METS Lab wherein the unit was subjected to a load of 960 watts, exceeding the manufacturer's specifications.

- Mets and UCD are separate entities, and it is improper and without foundation for UCD to rely on second-hand information as the basis for asserted performance issues with the technology. UCD did not engage in any substantive research activities, let alone those with proper preparation, supervision and control without intended technical parameters.

WE REPEAT: Given the numerous and catastrophic flaws in the Report, it is not only grossly unfair but would be highly damaging to Western for it to be published as a credible work of UCD authorship, and highly inconsistent with UCD's reputation for competent, complete and thorough scientific reporting. The Report's conclusions are also contradicted by the 25 successful field tests of the HyMax™ technology. If the Report is made public in its present form, it will be highly damaging to Western's reputation as well as that of its technology partners. The damage is further exacerbated by the fact that UCD has refused Western's request for an opportunity to address and cure, if possible, any legitimate deficiencies, before the Report is published.

If UCD nevertheless proceeds to publish the flawed Report, Western demands the following. First, any publication must not include disclosure of Western's confidential and proprietary information. As previously explained, there was clearly an understanding between Western, Caltrans and UCD that the HyMax™ technology was confidential and proprietary, and was being disclosed to Caltrans and UCD strictly with the understanding that it would remain so and disclosed internally only as necessary for testing purposes. With this understanding, Western did not object to Mr. Torick's copying of Western's proprietary designs for internal use, for example as shown in FIGURES 2.1, 2.4 and 3.3 of the Report. But whether original designs or copies made therefrom, these remain Westerns confidential and proprietary information, and must not be disclosed outside the limited testing team, let alone disseminated to the public in any published report. If UCD ignores Western's repeated warning on this point and proceeds to publish or in any way publicly disclose Western's confidential and proprietary information, such actions will be deemed intentional, willful infringement of Western's rights, and subject UCD to corresponding legal liability.

Second, while Western does not believe that the damaging nature of the flawed Report will be rectified by such actions, Western demands that this letter and enclosures in their entirety be published or otherwise distributed with any copy of UCD's Report, as offered by UCD.

As demonstrated on a daily basis in at least the ongoing successful performance of the many field test systems, HyMax™ technology remains viable and highly desirable for commercialization. UCD's flawed report and refusal to work with Western to address any legitimate concerns and perform viable research—which Western believes UCD is capable of doing—may set back important technical advances reflected in the HyMax™ technology. Nevertheless, for its part,

Mr. Shima Narari
Mr. Dave Torick
April 9, 2024
Page - 6

Western remains willing to continue working with the Caltrans/UCD team if the threatened publication is avoided and the parties can resolve this Report dispute.

Very truly yours,

LOWE GRAHAM JONES^{PLLC}



David A. Lowe

Enclosures:

- Updated Preliminary Report Critique
- Diagnostic Log from Plug unit
- Cc: Dean Campbell (dean.campbell@dot.ca.gov)
Justin Ellis (justin.ellis@dot.ca.gov)
Sean Shackelford (Sean.Shackelford@dot.ca.gov)
Keith Hoffman (keith.hoffman@dot.ca.gov)
Patrick Myers (Patrick.Myers@dot.ca.gov)
Western Systems, Inc.

UCD Report	Western Rebuttal
<p>Page ii: Executive Summary: The results in this report are based on the first HyMax™ system that was produced by Western, it may not have been representative of the current production level HyMax™ system. Western has installed multiple HyMax™ systems in California and other states, the performance of these units over time can be an indicator of the technology readiness for adoption by Caltrans.</p>	<p>UCD acknowledges that the system delivered for the lab testing was the first assembled HyMax™ prototype system and it may not represent the current level of production HyMax™ systems being deployed in California. In fact, Western has more than 25 HyMax™ systems deployed with no failures.</p>
<p>Page 7, Figure 2.1 Three Main Components of the HyMax™ System; Page 3, Figure 2.4 HFC Cabinet Rendering ; Page 5, Figure 2.4: HFC Cabinet Rendering; Page 9, Figure 3.3: CAD Rendering of HyMax™ System with BBS Cutout</p>	<p>These renderings are a copy of our design and mockup of the HyMax™ solution. Publishing this rendering could violate Western System IP rights and should be removed from the published report.</p>
<p>Page iii, Major Results & Recommendations:</p> <p>Although HFC technology and the current design by Western (Western) should be able to deliver many days of PSPS alternative power, their system did not meet reliability expectations from the project panel. Western delivered two different HFC for testing, and neither unit was able to run for more than several hours without needing to be reset due to alarms that were triggered.</p>	<p>No pictures/descriptions of test set-up/wiring/plumbing to hydrogen storage provided. No data provided on the initial system set-up via internal GUI screens for modes of operation, set points for low fuel, set points for low voltage threshold, set points for dormancy refresh cycles, low fuel, out of fuel alarms, H2 leak alarm level, etc. No written step by step test procedure provided by UCD or METS lab. Western provided spec cut sheets, integrated engineering specs, and test guidelines well in advance of METS lab testing so that a detailed test plan/procedure could be developed by UCD and METS lab and reviewed by Western and Plug Power.</p>
<p>Chapter Three, page 6, Supplier Issues: During the spring of 2021, Western invited Caltrans staff to visit a HFC manufacturer that they had partnered with, Altergy Systems. Working together, Altergy and Western have put several HFC BBS systems into operation at traffic lights for both California State and county owned intersections.</p> <p>In June of 2022, Western informed AHMCT and Caltrans that Altergy Systems has gone out of business, and they were working to partner with a new HFC supplier, Plug Power. The Western supplier issue most likely led to the delay in their response to inquiries and quote generation.</p>	<p>As stated, we were to provide Altergy, and as noted, Altergy went out of business. We stated that we are in the process of designing and manufacturing new Fuel Cell technology for the Transportation industry. During the process we felt pressure to finalize the design and manufacturing and supplying UCD a prototype. It was stated if we were unable to provide the equipment, the contract would be terminated. We provided them our first ever prototype of the HyMax™ fuel cell system.</p>

<p>Chapter Three, page 6, Design Issues: Western was the system integrator of the Plug Power HFC to be used in conjunction with a BBS. Their initial cabinet design and plumbing was a concern for the project panel due to maintenance concerns. The initial design had a solid plate in the H2 storage cabinet, a stretch Model 332 cabinet, on which the H2 bottles would be seated. Under this plate, the conduits for the conductors and communication/control cables would enter from the foundation. The initial design only had a 3-inch clearance. The project panel was concerned that this would not allow new cables to be pulled if there was an issue with the conductors. Western redesigned the base plate and added an oval slot and thickened the plate to allow better access to the conduit for maintenance.</p>	<p>This statement and title "Design Issues" is subjective. Caltrans felt that they needed the design to be modified and changed to access conduits/pull cables in case new conduits were needed. Currently, we have other customers satisfied with the first design/conduit access. Subsequently, we confirmed with Plug Power that no high power AC wiring can be routed through the 332 fuel storage cabinet; only low voltage DC is allowed by code. This necessitated a redesign of the BBS NEMA cabinet to allow the (2) conduits, ground, and control wiring to be pulled from the base on the BBS cabinet, which now extends to the foundation instead of hanging piggy-back off the 332 cabinet.</p>
<p>Chapter Three, page 10: Caltrans expected the HyMax™ system to be a drop-in-place product that would not require Caltrans to assemble or wire cabinets or components. The design suggested by Western lacked a clear differentiation between Western and Caltrans responsibility.</p>	<p>The report states that Western lacked a clear differentiation between Western and Caltrans responsibilities. It was clearly shown and stated during phone conversations that the 3 HyMax™ enclosures would have to be integrated together onsite for field deployment.</p>
<p>Chapter Three, page 11: The project panel intended for this first unit to be tested in a more controlled environment to determine its ability to meet specifications before being delivered to the District 2 for installation. However, as noted in the report in Appendix D from METS EQASI, there were significant issues during the evaluation which required the evaluation to stop prematurely and thus approval onto the NPEP list was not possible</p>	<p>The report mentioned significant issues during the HyMax™ evaluation, as noted in Appendix D. To date, UCD has not provided a populated Appendix D, so Western cannot review/rebut these "significant issues".</p>
<p>Chapter 3, page 11: After the electrically catastrophic failure and a project summary meeting with all parties on September 12, 2023, AHMCT, Caltrans, and Western decided to cancel the purchase order, and active research concluded on the research project.</p>	<p>After discussion on September 12, Western was told by UCD that the purchase order was being cancelled. We requested that the evaluation continue. The project panel voted not to continue the evaluation and the purchase order was cancelled.</p>

<p>Chapter 3, page 11: The tests that were conducted are discussed in Chapter 4, but Western's HyMax™ system had several issues that are summarized below:</p> <ul style="list-style-type: none"> • H₂ inlet line ferrule not properly seated, which caused a hydrogen leak and required a field adjustment to use a flexible hose. • Low-pressure solenoid failed to open, which was determined to be caused by an issue with the Plug Power HFC. A new HFC was delivered as a replacement. • Multiple error codes occurred during testing associated with a H₂ leak detection. This error was intermittent but occurred on the majority of start-ups. A solution was not found for this problem. • An electrically catastrophic failure occurred on September 6, 2023, after simulating a complete disconnection from power and restart. The root cause of this problem has not been identified by Western at the time of this report. 	<p>Per Plug Power's review of the event logs from the returned system and replacement system: The logs showed that the METS lab constantly was shutting the system down, then turning it back on right away and making it call for power. This is not a normal operating process and this activity over a long duration shorted out numerous shunt system differential amplifiers which cause the bottom cell stack to completely fail and eventually burn a hole in the stacks that produced a hydrogen leak & resulted in a catastrophic failure. Based on the Plug Power review of the event logs and no test procedure documentation provided to dispute otherwise, the METS lab actually created the catastrophic failure of the equipment by constantly turning the system on/off. No documentation was provided to show that it was needed to completely disconnect power and restart. In fact, Western was never informed why it was necessary to completely remove power and restart.</p>
<p>Chapter 4, page 19: Laboratory Testing on HyMax™ System: Table HyMax™ System Performance 2-hour Tests summarizes the completed tests and system performance. The power output varied more than what was recorded in the field trials. Without field trials of the HyMax™ System it cannot be verified if these are typical operations for the Plug Power HFC utilized in the HyMax™ System or if it resulted from the laboratory setup.</p>	<p>A 952 watt AC load was applied per the fourth entry in the table. Dividing this AC power level by the inverter efficiency (~0.82), equates to a DC load as seen by the fuel cell of 1161W, above the net output capability of 1.1kW. In documentation provided to UCD and the METS lab prior to any lab testing, specifically "The Integrated Fuel and UPS/BBS Backup Power System Engineering Specification", on page 2, section 1.1 states: The FCBS shall be capable of providing power for full signal operation for an intersection with green, yellow, and red lights including detection, cameras, and other loads. The total load for the full-time operation shall not exceed nine hundred watts (900 W). Exceeding the recommendation could cause unpredictable operation and intermittent error/alarms.</p> <p>The Caltrans METS lab personnel conducted the testing on the HyMax™ system equipment, not UCD, who submitted this report. Western feels we should have received the supporting documentation from Caltrans METS on their lab testing. To date, we have requested this supporting documentation and not yet received it.</p>

FEBRUARY 8TH, 2024 EMAIL FROM SHIMA NAZARI

We are writing in response to your letter of December 15th, 2023, raising allegations regarding our testing and the final report we are preparing related to the evaluation of HyMax System. We would like to clarify that although UCD has no obligation to consider or include in its final report any "rebuttal" to its independent research, as a courtesy to Western, UCD is willing to include a response from Western in UC's final report to Caltrans. Our final report is currently scheduled to be submitted on April 10th, 2024. In the meantime, we have attached to this email the followings:

1. Our draft 95% final report,
2. A draft copy of the METS EQASI report
3. The test procedure METS EQASI used

We feel compelled to address the allegations and implications raised in Western' letter of December 15, 2023. As described below, UCD finds that Western' letter includes several unfounded statements and erroneous conclusions, which either ignore or obfuscate important facts concerning the design and implementation of our study.

First, your letter improperly suggests that Caltrans or UCD may have incorrectly installed the Western equipment that was evaluated. As Western knows, neither Caltrans nor UCD set up the equipment; nor did they set or modify any of the parameters using the GUI. Either your client (Western) or a 3rd party (e.g. a contractor) hired by your client performed these operations. UCD had no responsibility in setting up this system, this was done completely by your client, or a 3rd party used by your client.

Second, we address the bullet points in your letter one by one as follows:

<p>a. Allegation: UCD failed to specify setup/test plans/procedures to fully test the system functionality in its intended operating environment and application, including wire/plumbing to hydrogen storage.</p>	
<p>Response: Western should review the test plan and draft final report attached to this email. As UCD stated in the report that was previously provided, Western or their contractors performed the setup and commissioning. Also, UCD on numerous occasions inquired about wire/plumbing diagrams for the HyMax system and was never provided with these documents.</p>	<p>Western was never provided with test procedure before or during the process from Caltrans METS or UCD.</p>

<p>b. Allegation: UCD failed to specify initial system set-up via internal GUI screens for modes of operation, set points for low fuel, set points for low voltage threshold, set points for dormancy refresh cycles, low fuel, out of fuel alarms, H2 leak alarm level, etc.</p>	
<p>Response: Contrary to this allegation, Western delivered and set up the system for testing and evaluation and was involved in ongoing calibration of the equipment and alarms throughout the research. As part of that process, Western established these set-points and also modified these set-points over time to try to prevent activating the system alarms.</p>	<p>Western took care to ensure that alarm settings were configured appropriately to avoid unnecessary activations, such as setting the low fuel warning threshold too high to prevent false alarms. It's important to clarify that no technician from Western attempted to manipulate safety alarms, such as those for leaks, to prevent their activation. Furthermore, it should be noted that the graphical user interface (GUI) does not provide the capability to modify internal alarm settings of this nature. Regarding UCD, no adjustments were made to the HyMax system, and no actions were taken at Mets Lab.</p>
<p>c. Allegation: UCD failed to confirm adherence to HyMax engineering specifications, spec cut sheets, and a high-level test plan provided by Western well in advance of METS lab testing. This is demonstrated in part by the diagnostic logs from the Plug unit, enclosed, which the Caltrans MET lab had in its possession for the testing and evaluation, which identifies the misuse of the equipment during testing procedures.</p>	
<p>Response: We have reviewed our records and have been unable to identify any emails or written correspondence from Western related to these documents prior to initiating the testing. UCD requests that Western clarify how and when these items were communicated to UC. The only related document that Western sent to UCD was the spec cut sheet. However, this document was emailed to us in August due to another concern which was raised during testing. Just last month, UCD received copies of some of the mentioned documents from METS.</p>	<p>UCD conducted no testing. It is imperative to delineate that Mets and UCD cannot be considered interchangeable entities.</p>

	<p>METS received all relevant manuals pertaining to the Alpha BBS system and the Plug Power HFC engine. As indicated on page 1 of the Plug Power manual, it explicitly advises against operating the system at 900 watts or higher. Furthermore, the manual addresses procedures for system restarts, stipulating a minimum waiting period of 15 minutes for the re-closure of the front-panel breaker if opened during operation, whereas no such restriction applies when the system is in "Standby" mode. This procedure is outlined as the sole method for clearing latching alarms for troubleshooting purposes.</p> <p>UCD did not engage with the equipment in question, thus precluding any possibility of equipment misuse. Mets Lab operated the equipment beyond its designated parameters. Such actions were likely attributable to a lack of familiarity by parties involved with the Plug unit and compounded by insufficient support from Plug themselves.</p>
<p>e. Allegation: UCD failed to disclose the system parameters and test conditions leading to what it called the "electrically catastrophic failure" that allegedly occurred.</p>	
<p>Response: In our final report, attached hereto, we have clarified that we ended the research "when the second unit or system was unable to restart" (please see pages iii, 2, 11, and 15). We also indicated that "we were unable to determine if the failures of the HyMax System were as a result of Wester Systems or their contractor's set up and commissioning or if the failures were due to the HFC".</p>	<p>In response to your statement, I must clarify to our knowledge UCD did not engage in any research activities. While communication occurred with Mets Lab regarding testing procedures, UCD did not participate in any testing endeavors. Additionally, it is important to note that only one unit underwent an engine swap, with the initial engine proving to be dysfunctional and subsequently replaced. The subsequent engine underwent stress testing until it reached failure. It is critical to emphasize that there was no cessation of testing as it had not commenced. However, UCD did not fulfill its contractual obligation to purchase four HyMax systems intended for research purposes.</p>
<p>f. Allegation: Despite claiming multiple performance issues, UCD failed to provide detailed documentation/information of what caused that failure or the operations conditions leading to the alleged failure.</p>	

<p>Response: The test procedure followed by METS and their Report on evaluation of the HyMax system that includes additional details such as startup procedure, test plan, and list of alarms are attached to this email. We should highlight that in the provided test plan only scenario 1 was attempted for evaluation of the HyMax system.</p>	<p>As of the current moment, Western has not received a test procedure from either UCD or METS Lab. This status remains unchanged both preceding and leading up to the final failure of the unit.</p>
<p>g.Allegation: UCD failed to provide the technical qualifications for the individuals involved during each testing procedure.</p>	
<p>Response: The tests were performed by Materials Engineering & Testing Services Electrical Quality Assurance & Source Inspection of Caltrans (in this email referred to as METS) under the supervision and guidance by Western or their Contractor. Please see the METS report for more information.</p>	<p>Western was only allowed to be present for a portion of the testing, and notably not during the phase when the unit was tested to failure. Notably, throughout approximately half of the testing duration, there were no sightings of individuals from UCD.</p> <p>At a certain juncture, Western observed a test conducted by METS Lab wherein the unit was subjected to a load of 960 watts, exceeding the manufacturer's specifications.</p>
<p>i. Allegation: UCD fails to explain how it purports to have prepared the Report, yet Caltrans apparently performed HyMax testing. If that is the case, where is the contemporaneous supporting documentation from Caltrans, which has been requested by Western but not produced? UCD has failed to provide for Western's review Appendix D: METS EQASI QASI Hyrax Report.</p>	

j. Response: Caltrans METS performed the testing under supervision of representative of Western. There seems to be a concern that the highest load applied to the system was outside of the recommendations. However, the value reported in the final report is the actual output of the HyMax system, which is within the advertised power range of the system.

Please review the METS report attached to this email.

It is important to underscore that page 1 of the Plug Power manual explicitly cautions against operating the system with a load exceeding 900 watts. The statement made regarding supervision can be considered accurate if interpreted as guidance from a knowledgeable source. However, if construed as necessitating constant oversight by a Western representative during testing, it is inaccurate.

As noted above, testing proceeded in Western's absence and without its opportunity for input, supervision or control, to ensure that testing occurred within allowed parameters.

Mets is an independent entity separate from UCD. Therefore, any reliance on second-hand information from Mets as a basis for asserting involvement in "Science and Research" is unfounded. Had UCD genuinely undertaken research, it would have been attentive to the manufacturer's instructions regarding the 900W load and potentially collaborated with Mets Lab to conduct thorough testing, thereby averting the system failure.

UCD's portrayal of their role in the HyMax evaluation process is misleading. Contrary to their claims, they did not engage substantively in research activities. Instead, their involvement was limited to proposing numerous design modifications, for which they subsequently breached contractual obligations.

Please inform your client to send their response, backed by factual and correct data, to us within 60 days of this email. Please be informed that UCD will submit its final report to Caltrans on April 10th, 2024, regardless of whether UCD receives any response or rebuttal from Western.

3657 09/07/23 08:42:24 USER LOGGED IN	WEB ADMIN1	
3656 09/07/23 08:40:49 RUN END DATA	CV-Sys Days To Next Exer: 1	
3655 09/07/23 08:40:49 RUN END DATA	CV-Sys T: 0 0 0.0	
3654 09/07/23 08:40:49 RUN END DATA	CV-Sys B: 0 0 0.0	
3653 09/07/23 08:40:49 RUN END DATA	CV-Sys O: 0 0 # 90	
3652 09/07/23 08:40:49 RUN END DATA	CV-Sys 26:18h 14.93kh 567.57w	
3651 09/07/23 08:40:49 CONTACT STOP	CV-Sys	
3650 09/07/23 08:40:42 WARNING	CV-Sys Mn,BotMod Fail OCV	Bottom cell stack failure
3649 09/07/23 08:40:42 SYSTEM RUN ENDED	CV-Sys	System run ended
3648 09/07/23 08:40:42 WARNING	CV-Sys Bot OCV Fail: 5.02 v	
3647 09/07/23 08:40:35 ALARM ON	CC-Sys Mn,H2 Low Pressure	Minor alarm, H2 low pressure
3646 09/07/23 08:40:31 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules	Start system
3645 09/07/23 08:40:19 START UP DATA	CV-Sys Alarms: 0000000000000000	
3644 09/07/23 08:40:19 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM	
3643 09/07/23 08:40:19 START UP DATA	CV-Sys FID = CC:02.07.08	
3642 09/07/23 08:40:19 START UP DATA	CV-Sys LVS= 47.9,2,52.5,21.5	
3641 09/07/23 08:40:19 START UP DATA	CV-Sys 51.8v, 774p,2.71v,2.68v	
3640 09/07/23 08:40:19 CONTACT START	CV-Sys Contact SN: PPS23249002	
3639 09/07/23 08:40:11 LOW PRESSURE ALERT ON	CC-Sys	
3638 09/07/23 08:40:06 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 1.5a 0w	
3637 09/07/23 08:40:06 SYSTEM OUTPUT	CV-Sys Top: 0.2v 1.2a 0w	
3636 09/07/23 08:40:05 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set	
3635 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set	
3634 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48	
3633 09/07/23 08:40:05 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48	System energized
3632 09/06/23 16:43:05 SYSTEM DE-ENERGIZED	CC-Sys	System de-energized
3631 09/06/23 16:42:51 WARNING	CV-Sys Mn,BotMod Fail OCV	Bottom cell stack failure
3630 09/06/23 16:42:51 SYSTEM RUN ENDED	CV-Sys	System run ended
3629 09/06/23 16:42:51 WARNING	CV-Sys Bot OCV Fail: 4.78 v	Warning Bottom cell stack
3628 09/06/23 16:42:46 LOW PRESSURE ALERT ON	CC-Sys	H2 low pressure alert
3627 09/06/23 16:42:40 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules	System Start
3626 09/06/23 16:42:40 START UP DATA	CV-Sys Alarms: 0000000000000000	
3625 09/06/23 16:42:40 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM	
3624 09/06/23 16:42:40 START UP DATA	CV-Sys FID = CC:02.07.08	
3623 09/06/23 16:42:40 START UP DATA	CV-Sys LVS= 47.9,2,52.5,29.3	
3622 09/06/23 16:42:40 START UP DATA	CV-Sys 51.3v,1148p,3.01v,3.02v	
3621 09/06/23 16:42:40 CONTACT START	CV-Sys Contact SN: PPS23249002	
3620 09/06/23 16:40:45 SYSTEM OUTPUT	CV-Sys Bot: 0.1v 0.5a 0w	
3619 09/06/23 16:40:45 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.4a 0w	
3618 09/06/23 16:40:44 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set	
3617 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set	
3616 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x04	
3615 09/06/23 16:40:43 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x04	System energized
3614 09/06/23 16:40:41 SYSTEM DE-ENERGIZED	CC-Sys	System de-energized
3613 09/06/23 16:34:31 SYSTEM OUTPUT	CV-Sys Bot: 0.1v 0.4a 0w	
3612 09/06/23 16:34:31 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.2a 0w	
3611 09/06/23 16:34:30 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set	
3610 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set	
3609 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48	
3608 09/06/23 16:34:30 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48	
3607 09/06/23 16:34:26 SYSTEM DE-ENERGIZED	CC-Sys	
3606 09/06/23 16:33:58 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.8a 0w	
3605 09/06/23 16:33:58 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.7a 0w	

3604 09/06/23 16:33:57 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set	
3603 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set	
3602 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48	
3601 09/06/23 16:33:57 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48	
3600 09/06/23 14:47:59 SYSTEM DE-ENERGIZED	CC-Sys	System energized System de-energized
3599 09/06/23 14:47:17 RUN END DATA	CV-Sys Days To Next Exer: 1	
3598 09/06/23 14:47:17 RUN END DATA	CV-Sys T: 0 0 22.1	
3597 09/06/23 14:47:17 RUN END DATA	CV-Sys B: 0 0 0.0	
3596 09/06/23 14:47:17 RUN END DATA	CV-Sys O: 0 0 # 89	
3595 09/06/23 14:47:17 RUN END DATA	CV-Sys 26:18h 14.93kh 567.57w	
3594 09/06/23 14:47:17 CONTACT STOP	CV-Sys	Contact stop
3593 09/06/23 14:47:07 WARNING	CV-Sys Mn,BotMod Fail OCV	Warning bottom stack failure
3592 09/06/23 14:47:07 SYSTEM RUN ENDED	CV-Sys	System run ended
3591 09/06/23 14:47:07 WARNING	CV-Sys Bot OCV Fail: 4.69 v	
3590 09/06/23 14:46:57 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules	System start attempted
3589 09/06/23 14:46:35 WARNING	CV-Sys Mn,BotMod Fail OCV	Warning bottom stack failure
3588 09/06/23 14:46:35 SYSTEM RUN ENDED	CV-Sys	System run ended
3587 09/06/23 14:46:35 WARNING	CV-Sys Bot OCV Fail: 4.69 v	
3586 09/06/23 14:46:25 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules	System start attempted
3585 09/06/23 14:46:04 START UP DATA	CV-Sys Alarms: 0000000000000000	
3584 09/06/23 14:46:04 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM	
3583 09/06/23 14:46:04 START UP DATA	CV-Sys FID = CC:02.07.08	
3582 09/06/23 14:46:04 START UP DATA	CV-Sys LVS= 47.9,2,52.5,40.0	
3581 09/06/23 14:46:04 START UP DATA	CV-Sys 50.5v,1177p,2.66v,2.32v	
3580 09/06/23 14:46:04 CONTACT START	CV-Sys Contact SN: PPS23249002	
3579 09/06/23 14:46:03 ALARM OFF	CV-Sys Mj,Rt H2 SensorLeak	
3578 09/06/23 14:46:01 SYSTEM RUN ENDED	CV-Sys	System run ended
3577 09/06/23 14:46:01 WARNING	CV-Sys Mj,Rt H2 SensorLeak	
3576 09/06/23 14:46:01 SYSTEM RUN ENDED	CV-Sys	
3575 09/06/23 14:46:01 ALARM ON	CV-Sys Mj,Rt H2 SensorLeak	Major alarm H2 sensor leak
3574 09/06/23 14:45:53 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules	System start attempted
3573 09/06/23 14:45:31 WARNING	CV-Sys Mn,BotMod Fail OCV	Warning bottom stack failure
3572 09/06/23 14:45:31 SYSTEM RUN ENDED	CV-Sys	System run ended
3571 09/06/23 14:45:31 WARNING	CV-Sys Bot OCV Fail: 4.69 v	Warning bottom stack failure
3570 09/06/23 14:45:21 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules	System start attempted
3569 09/06/23 14:45:04 START UP DATA	CV-Sys Alarms: 0000000000000000	
3568 09/06/23 14:45:04 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM	
3567 09/06/23 14:45:04 START UP DATA	CV-Sys FID = CC:02.07.08	
3566 09/06/23 14:45:04 START UP DATA	CV-Sys LVS= 47.9,2,52.5,39.4	
3565 09/06/23 14:45:04 START UP DATA	CV-Sys 50.3v,1174p,2.75v,2.74v	
3564 09/06/23 14:45:04 CONTACT START	CV-Sys Contact SN: PPS23249002	
3563 09/06/23 14:44:51 RUN END DATA	CV-Sys Days To Next Exer: 1	
3562 09/06/23 14:44:51 RUN END DATA	CV-Sys T: 4 8 22.1	
3561 09/06/23 14:44:51 RUN END DATA	CV-Sys B: 0 0 0.0	
3560 09/06/23 14:44:51 RUN END DATA	CV-Sys O: 76 0 # 88	
3559 09/06/23 14:44:51 RUN END DATA	CV-Sys 26:18h 14.93kh 567.57w	
3558 09/06/23 14:44:51 CONTACT STOP	CV-Sys	
3557 09/06/23 14:44:50 SYSTEM OUTPUT	CV-Sys 22.8v 34.3c 25.0c	
3556 09/06/23 14:44:50 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w	
3555 09/06/23 14:44:50 SYSTEM OUTPUT	CV-Sys Max O/T/B: 0w 8w 0w	
3554 09/06/23 14:44:50 SYSTEM OUTPUT	CV-Sys Bot: 0.1v 0.4a 0w	
3553 09/06/23 14:44:50 SYSTEM OUTPUT	CV-Sys Top: 22.8v 0.3a 5w	
3552 09/06/23 14:44:50 SYSTEM OUTPUT	CV-Sys out: 50.4v 0.0a 0.0w	

3551 09/06/23 14:44:24 SYSTEM RUNNING CV-Sys
 3550 09/06/23 14:44:21 START UP DATA CV-Sys Top/Bot OCV: 21.83v 0.15 v
 3549 09/06/23 14:44:18 SYSTEM START ATTEMPT CV-Sys Top Module
 3548 09/06/23 14:43:56 SYSTEM RUN ENDED CV-Sys
 3547 09/06/23 14:43:56 WARNING CV-Sys Bot OCV Fail: 4.73 v
 3546 09/06/23 14:43:45 SYSTEM START ATTEMPT CV-Sys Bot/Top Modules
 3545 09/06/23 14:43:23 WARNING CV-Sys Mn,BotMod Fail OCV
 3544 09/06/23 14:43:23 SYSTEM RUN ENDED CV-Sys
 3543 09/06/23 14:43:23 WARNING CV-Sys Bot OCV Fail: 4.73 v
 3542 09/06/23 14:43:12 SYSTEM START ATTEMPT CV-Sys Bot/Top Modules
 3541 09/06/23 14:42:50 WARNING CV-Sys Mn,BotMod Fail OCV
 3540 09/06/23 14:42:50 SYSTEM RUN ENDED CV-Sys
 3539 09/06/23 14:42:50 WARNING CV-Sys Bot OCV Fail: 4.71 v
 3538 09/06/23 14:42:40 SYSTEM START ATTEMPT CV-Sys Bot/Top Modules
 3537 09/06/23 14:42:39 START UP DATA CV-Sys Alarms: 0000000000000000
 3536 09/06/23 14:42:39 START UP DATA CV-Sys FID = E11CV:02.07.08.TM
 3535 09/06/23 14:42:39 START UP DATA CV-Sys FID = CC:02.07.08
 3534 09/06/23 14:42:39 START UP DATA CV-Sys LVS= 47.9,2,52.5,36.2
 3533 09/06/23 14:42:39 START UP DATA CV-Sys 53.7v,1177p,3.05v,3.06v
 3532 09/06/23 14:42:39 CONTACT START CV-Sys Contact SN: PPS23249002
 3531 09/06/23 14:42:39 ALARM OFF CV-Sys Mn,BotMod Fail OCV
 3530 09/06/23 14:39:35 USER LOGGED IN WEB ADMIN1
 3529 09/06/23 14:37:17 RUN END DATA CV-Sys Days To Next Exer: 1
 3528 09/06/23 14:37:17 RUN END DATA CV-Sys T: 13 61 20.1
 3527 09/06/23 14:37:17 RUN END DATA CV-Sys B: 0 0 0.0
 3526 09/06/23 14:37:17 RUN END DATA CV-Sys O: 0 4 # 87
 3525 09/06/23 14:37:17 RUN END DATA CV-Sys 26:17h 14.93kh 567.73w
 3524 09/06/23 14:37:17 CONTACT STOP CV-Sys
 3523 09/06/23 14:37:17 SYSTEM OUTPUT CV-Sys 20.4v 53.9c 25.3c
 3522 09/06/23 14:37:17 SYSTEM OUTPUT CV-Sys Min O/T/B: 0w 0w 0w
 3521 09/06/23 14:37:17 SYSTEM OUTPUT CV-Sys Max O/T/B: 5w 60w 0w
 3520 09/06/23 14:37:17 SYSTEM OUTPUT CV-Sys Bot: 8.8v 0.3a 0w
 3519 09/06/23 14:37:17 SYSTEM OUTPUT CV-Sys Top: 20.5v 2.0a 36w
 3518 09/06/23 14:37:17 SYSTEM OUTPUT CV-Sys out: 50.3v 0.0a 0.0w
 3517 09/06/23 14:36:59 SYSTEM RUNNING CV-Sys
 3516 09/06/23 14:36:56 START UP DATA CV-Sys Top/Bot OCV: 22.69v 0.15 v
 3515 09/06/23 14:36:53 SYSTEM START ATTEMPT CV-Sys Top Module
 3514 09/06/23 14:36:31 ALARM ON CV-Sys Mn,BotMod Fail OCV
 3513 09/06/23 14:36:31 SYSTEM RUN ENDED CV-Sys
 3512 09/06/23 14:36:31 WARNING CV-Sys Bot OCV Fail: 4.57 v
 3511 09/06/23 14:36:21 SYSTEM START ATTEMPT CV-Sys Bot/Top Modules
 3510 09/06/23 14:35:59 WARNING CV-Sys Mj,ModFail, Open CV
 3509 09/06/23 14:35:59 SYSTEM RUN ENDED CV-Sys
 3508 09/06/23 14:35:59 WARNING CV-Sys Bot OCV Fail: 4.63 v
 3507 09/06/23 14:35:59 WARNING CV-Sys Top OCV Fail: 4.47 v
 3506 09/06/23 14:35:48 SYSTEM START ATTEMPT CV-Sys Bot/Top Modules
 3505 09/06/23 14:35:26 WARNING CV-Sys Mj,ModFail, Open CV
 3504 09/06/23 14:35:26 SYSTEM RUN ENDED CV-Sys
 3503 09/06/23 14:35:26 WARNING CV-Sys Bot OCV Fail: 4.36 v
 3502 09/06/23 14:35:26 WARNING CV-Sys Top OCV Fail: 4.33 v
 3501 09/06/23 14:35:16 SYSTEM START ATTEMPT CV-Sys Bot/Top Modules
 3500 09/06/23 14:34:55 START UP DATA CV-Sys Alarms: 0000000000000000

Note repeated system start/stop below



Multiple start/stop; top/bottom stack fails



3499 09/06/23 14:34:55 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM	<p>Multiple start/stops/stack/h2 leaks</p> 
3498 09/06/23 14:34:55 START UP DATA	CV-Sys FID = CC:02.07.08	
3497 09/06/23 14:34:55 START UP DATA	CV-Sys LVS= 47.9,2,52.5,45.1	
3496 09/06/23 14:34:55 START UP DATA	CV-Sys 48.8v,1180p,2.91v,2.45v	
3495 09/06/23 14:34:55 CONTACT START	CV-Sys Contact SN: PPS23249002	
3494 09/06/23 14:34:54 ALARM OFF	CV-Sys MJ,Rt H2 SensorLeak	
3493 09/06/23 14:34:53 SYSTEM RUN ENDED	CV-Sys	
3492 09/06/23 14:34:53 WARNING	CV-Sys MJ,Rt H2 SensorLeak	
3491 09/06/23 14:34:53 SYSTEM RUN ENDED	CV-Sys	
3490 09/06/23 14:34:53 ALARM ON	CV-Sys MJ,Rt H2 SensorLeak	
3489 09/06/23 14:34:45 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules	
3488 09/06/23 14:34:43 START UP DATA	CV-Sys Alarms: 0000000000000000	
3487 09/06/23 14:34:43 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM	
3486 09/06/23 14:34:43 START UP DATA	CV-Sys FID = CC:02.07.08	
3485 09/06/23 14:34:43 START UP DATA	CV-Sys LVS= 47.9,2,52.5,45.3	
3484 09/06/23 14:34:43 START UP DATA	CV-Sys 51.4v,1180p,2.99v,3.00v	
3483 09/06/23 14:34:43 CONTACT START	CV-Sys Contact SN: PPS23249002	
3482 09/06/23 14:34:20 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 11.5a 0w	
3481 09/06/23 14:34:20 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.4a 0w	
3480 09/06/23 14:34:19 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set	
3479 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set	
3478 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48	
3477 09/06/23 14:34:19 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48	
3476 09/06/23 14:32:00 SYSTEM DE-ENERGIZED	CV-SUI	
3475 09/06/23 14:33:56 CONTACT STOP	CV-Sys	
3474 09/06/23 14:33:56 SYSTEM OUTPUT	CV-Sys 21.1v 45.8c 26.4c	
3473 09/06/23 14:33:56 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w	
3472 09/06/23 14:33:56 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1735w 1002w 994w	
3471 09/06/23 14:33:56 SYSTEM OUTPUT	CV-Sys Bot: 21.1v 2.4a 48w	
3470 09/06/23 14:33:55 SYSTEM OUTPUT	CV-Sys Top: 21.1v 2.3a 51w	
3469 09/06/23 14:33:55 SYSTEM OUTPUT	CV-Sys out: 52.5v 0.2a 12.4w	
3468 09/06/23 14:26:37 SYSTEM RUNNING	CV-Sys	
3467 09/06/23 14:26:34 START UP DATA	CV-Sys Top/Bot OCV: 23.03v 23.01v	
3466 09/06/23 14:26:28 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules	
3465 09/06/23 14:26:28 START UP DATA	CV-Sys Alarms: 0000000000000000	
3464 09/06/23 14:26:28 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM	
3463 09/06/23 14:26:28 START UP DATA	CV-Sys FID = CC:02.07.08	
3462 09/06/23 14:26:28 START UP DATA	CV-Sys LVS= 47.9,2,52.5,29.8	
3461 09/06/23 14:26:28 START UP DATA	CV-Sys 54.0v,1184p,3.06v,3.06v	
3460 09/06/23 14:26:28 CONTACT START	CV-Sys Contact SN: PPS23249002	
3459 09/06/23 12:28:46 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.4a 0w	
3458 09/06/23 12:28:46 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.5a 0w	
3457 09/06/23 12:13:46 SYSTEM OUTPUT	CV-Sys Bot: 0.1v 0.3a 0w	
3456 09/06/23 12:13:46 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.1a 0w	
3455 09/06/23 11:58:46 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.8a 0w	
3454 09/06/23 11:58:46 SYSTEM OUTPUT	CV-Sys Top: 0.4v 0.6a 0w	
3453 09/06/23 11:43:46 SYSTEM OUTPUT	CV-Sys Bot: 0.7v 0.4a 0w	
3452 09/06/23 11:43:46 SYSTEM OUTPUT	CV-Sys Top: 21.3v 0.3a 6w	
3451 09/06/23 11:28:47 RUN END DATA	CV-Sys Days To Next Exer: 21	
3450 09/06/23 11:28:47 RUN END DATA	CV-Sys T: 489 689 18.6	
3449 09/06/23 11:28:47 RUN END DATA	CV-Sys B: 500 713 18.6	
3448 09/06/23 11:28:47 RUN END DATA	CV-Sys O: 858 1171 # 85	
3447 09/06/23 11:28:47 RUN END DATA	CV-Sys 26:10h 14.88kh 568.65w	

3446 09/06/23 11:28:47 CONTACT STOP	CV-Sys
3445 09/06/23 11:28:46 SYSTEM OUTPUT	CV-Sys 20.6v 50.1c 33.6c
3444 09/06/23 11:28:46 SYSTEM OUTPUT	CV-Sys Min O/T/B: 158w 129w 125w
3443 09/06/23 11:28:46 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1169w 680w 697w
3442 09/06/23 11:28:46 SYSTEM OUTPUT	CV-Sys Bot: 20.6v 5.4a 125w
3441 09/06/23 11:28:46 SYSTEM OUTPUT	CV-Sys Top: 20.6v 5.5a 129w
3440 09/06/23 11:28:46 SYSTEM OUTPUT	CV-Sys out: 52.7v 3.3a 174.2w
3439 09/06/23 11:27:11 SYSTEM OUTPUT	CV-Sys 18.1v 49.7c 54.6c
3438 09/06/23 11:27:11 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
3437 09/06/23 11:27:11 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1176w 689w 713w
3436 09/06/23 11:27:11 SYSTEM OUTPUT	CV-Sys Bot: 18.1v 30.7a 556w
3435 09/06/23 11:27:11 SYSTEM OUTPUT	CV-Sys Top: 18.1v 28.9a 523w
3434 09/06/23 11:27:11 SYSTEM OUTPUT	CV-Sys out: 52.7v 16.8a 885.5w
3433 09/06/23 11:12:11 SYSTEM RUNNING	CV-Sys
3432 09/06/23 11:12:08 START UP DATA	CV-Sys Top/Bot OCV: 22.37v 22.44v
3431 09/06/23 11:12:02 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
3430 09/06/23 11:12:02 START UP DATA	CV-Sys Alarms: 0000000000000000
3429 09/06/23 11:12:02 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
3428 09/06/23 11:12:02 START UP DATA	CV-Sys FID = CC:02.07.08
3427 09/06/23 11:12:02 START UP DATA	CV-Sys LVS= 47.9,2,52.5,36.7
3426 09/06/23 11:12:02 START UP DATA	CV-Sys 53.1v,1198p,3.04v,3.06v
3425 09/06/23 11:12:02 CONTACT START	CV-Sys Contact SN: PPS23249002
3424 09/06/23 11:11:17 EXERCISE TIME CHG	WEB
3423 09/06/23 11:11:11 EXERCISE DATE CHG	WEB User changed exercise day
3422 09/06/23 11:11:03 EXERCISE DATE CHG	WEB Reset due Exer Mode chg
3421 09/06/23 11:11:03 EXERCISE MODE CHG	WEB [AutoSchedule]
3420 09/06/23 11:05:36 RUN END DATA	CV-Sys Days To Next Exer: 9
3419 09/06/23 11:05:36 RUN END DATA	CV-Sys T: 493 699 18.6
3418 09/06/23 11:05:36 RUN END DATA	CV-Sys B: 503 712 18.5
3417 09/06/23 11:05:36 RUN END DATA	CV-Sys O: 862 1172 # 84
3416 09/06/23 11:05:36 RUN END DATA	CV-Sys 25:53h 14.64kh 565.57w
3415 09/06/23 11:05:36 CONTACT STOP	CV-Sys
3414 09/06/23 11:05:36 SYSTEM OUTPUT	CV-Sys 20.7v 50.1c 31.5c
3413 09/06/23 11:05:36 SYSTEM OUTPUT	CV-Sys Min O/T/B: 130w 103w 102w
3412 09/06/23 11:05:36 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1172w 698w 704w
3411 09/06/23 11:05:36 SYSTEM OUTPUT	CV-Sys Bot: 20.7v 4.8a 102w
3410 09/06/23 11:05:35 SYSTEM OUTPUT	CV-Sys Top: 20.7v 5.0a 363w
3409 09/06/23 11:05:35 SYSTEM OUTPUT	CV-Sys out: 52.6v 3.7a 193.4w
3408 09/06/23 10:51:13 SYSTEM OUTPUT	CV-Sys 18.3v 49.6c 56.4c
3407 09/06/23 10:51:13 SYSTEM OUTPUT	CV-Sys Min O/T/B: 558w 304w 307w
3406 09/06/23 10:51:13 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1172w 688w 710w
3405 09/06/23 10:51:13 SYSTEM OUTPUT	CV-Sys Bot: 18.3v 35.0a 639w
3404 09/06/23 10:51:13 SYSTEM OUTPUT	CV-Sys Top: 18.3v 35.7a 652w
3403 09/06/23 10:51:13 SYSTEM OUTPUT	CV-Sys out: 52.3v 21.9a 1145.0w
3402 09/06/23 10:36:13 SYSTEM OUTPUT	CV-Sys 17.8v 49.8c 48.5c
3401 09/06/23 10:36:13 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
3400 09/06/23 10:36:13 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1172w 695w 711w
3399 09/06/23 10:36:13 SYSTEM OUTPUT	CV-Sys Bot: 17.8v 19.4a 345w
3398 09/06/23 10:36:13 SYSTEM OUTPUT	CV-Sys Top: 17.8v 18.0a 319w
3397 09/06/23 10:36:13 SYSTEM OUTPUT	CV-Sys out: 52.6v 11.3a 596.5w
3396 09/06/23 10:21:13 SYSTEM RUNNING	CV-Sys
3395 09/06/23 10:21:10 START UP DATA	CV-Sys Top/Bot OCV: 23.07v 23.11v
3394 09/06/23 10:21:04 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules

3393 09/06/23 10:21:04 START UP DATA	CV-Sys Alarms: 0000000000000000
3392 09/06/23 10:21:04 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
3391 09/06/23 10:21:04 START UP DATA	CV-Sys FID = CC:02.07.08
3390 09/06/23 10:21:04 START UP DATA	CV-Sys LVS= 47.9,2,52.5,36.8
3389 09/06/23 10:21:04 START UP DATA	CV-Sys 53.2v,1232p,3.06v,3.08v
3388 09/06/23 10:21:04 CONTACT START	CV-Sys Contact SN: PPS23249002
3387 09/06/23 10:08:38 RUN END DATA	CV-Sys Days To Next Exer: 9
3386 09/06/23 10:08:38 RUN END DATA	CV-Sys T: 682 1014 17.1
3385 09/06/23 10:08:38 RUN END DATA	CV-Sys B: 683 1009 16.8
3384 09/06/23 10:08:38 RUN END DATA	CV-Sys O: 1203 1694 # 83
3383 09/06/23 10:08:38 RUN END DATA	CV-Sys 25:09h 14.00kh 556.84w
3382 09/06/23 10:08:38 CONTACT STOP	CV-Sys
3381 09/06/23 10:08:38 SYSTEM OUTPUT	CV-Sys 20.3v 56.3c 40.2c
3380 09/06/23 10:08:38 SYSTEM OUTPUT	CV-Sys Min O/T/B: 208w 226w 204w
3379 09/06/23 10:08:38 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1628w 962w 964w
3378 09/06/23 10:08:38 SYSTEM OUTPUT	CV-Sys Bot: 20.3v 8.0a 204w
3377 09/06/23 10:08:38 SYSTEM OUTPUT	CV-Sys Top: 20.3v 8.1a 226w
3376 09/06/23 10:08:38 SYSTEM OUTPUT	CV-Sys out: 52.6v 5.0a 264.7w
3375 09/06/23 10:07:57 SYSTEM OUTPUT	CV-Sys 17.0v 56.2c 57.8c
3374 09/06/23 10:07:57 SYSTEM OUTPUT	CV-Sys Min O/T/B: 831w 450w 439w
3373 09/06/23 10:07:57 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1640w 978w 978w
3372 09/06/23 10:07:57 SYSTEM OUTPUT	CV-Sys Bot: 16.9v 40.9a 692w
3371 09/06/23 10:07:57 SYSTEM OUTPUT	CV-Sys Top: 17.0v 39.7a 672w
3370 09/06/23 10:07:57 SYSTEM OUTPUT	CV-Sys out: 52.7v 21.0a 1106.8w
3369 09/06/23 09:52:57 SYSTEM OUTPUT	CV-Sys 17.2v 56.3c 63.8c
3368 09/06/23 09:52:57 SYSTEM OUTPUT	CV-Sys Min O/T/B: 653w 395w 411w
3367 09/06/23 09:52:57 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1699w 1014w 1009w
3366 09/06/23 09:52:57 SYSTEM OUTPUT	CV-Sys Bot: 17.2v 53.7a 922w
3365 09/06/23 09:52:57 SYSTEM OUTPUT	CV-Sys Top: 17.2v 54.9a 943w
3364 09/06/23 09:52:57 SYSTEM OUTPUT	CV-Sys out: 52.2v 30.9a 1610.8w
3363 09/06/23 09:37:57 SYSTEM OUTPUT	CV-Sys 17.8v 52.6c 51.2c
3362 09/06/23 09:37:57 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
3361 09/06/23 09:37:57 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1620w 930w 940w
3360 09/06/23 09:37:57 SYSTEM OUTPUT	CV-Sys Bot: 17.8v 23.1a 411w
3359 09/06/23 09:37:57 SYSTEM OUTPUT	CV-Sys Top: 17.8v 22.2a 395w
3358 09/06/23 09:37:57 SYSTEM OUTPUT	CV-Sys out: 50.3v 14.2a 712.2w
3357 09/06/23 09:22:57 SYSTEM RUNNING	CV-Sys
3356 09/06/23 09:22:54 START UP DATA	CV-Sys Top/Bot OCV: 23.91v 23.48v
3355 09/06/23 09:22:48 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
3354 09/06/23 09:22:48 START UP DATA	CV-Sys Alarms: 0000000000000000
3353 09/06/23 09:22:48 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
3352 09/06/23 09:22:48 START UP DATA	CV-Sys FID = CC:02.07.08
3351 09/06/23 09:22:48 START UP DATA	CV-Sys LVS= 47.9,2,52.5,26.9
3350 09/06/23 09:22:48 START UP DATA	CV-Sys 51.0v,1280p,3.05v,3.06v
3349 09/06/23 09:22:48 CONTACT START	CV-Sys Contact SN: PPS23249002
3348 09/06/23 09:10:09 USER LOGGED IN	WEB ADMIN1
3347 09/06/23 09:10:05 USER LOGGED OUT	WEB ADMIN1
3346 09/06/23 09:10:02 USER LOGGED OUT	WEB ADMIN1
3345 09/06/23 00:00:02 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.5a 0w
3344 09/06/23 00:00:02 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.2a 0w
3343 09/06/23 00:00:01 DAILY TEMPS	CC-Sys CC: High = 30 , Low = 28
3342 09/05/23 00:00:02 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.4a 0w
3341 09/05/23 00:00:02 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.6a 0w

3340 09/05/23 00:00:01 DAILY TEMPS	CC-Sys CC: High = 29 , Low = 28 CV-Sys Bot: 0.2v 0.5a 0w CV-Sys Top: 0.2v 0.4a 0w
3339 09/04/23 00:00:02 SYSTEM OUTPUT	CC-Sys CC: High = 29 , Low = 28 CV-Sys Bot: 0.2v 0.5a 0w CV-Sys Top: 0.2v 0.2a 0w
3338 09/04/23 00:00:02 SYSTEM OUTPUT	CC-Sys CC: High = 29 , Low = 28 CV-Sys Bot: 0.2v 0.5a 0w CV-Sys Top: 0.2v 0.2a 0w
3337 09/04/23 00:00:01 DAILY TEMPS	CC-Sys CC: High = 29 , Low = 28 CV-Sys Bot: 0.2v 0.5a 0w CV-Sys Top: 0.2v 0.2a 0w
3336 09/03/23 00:00:02 SYSTEM OUTPUT	CC-Sys CC: High = 28 , Low = 27 CV-Sys Bot: 0.1v 0.6a 0w CV-Sys Top: 0.2v 0.3a 0w
3335 09/03/23 00:00:02 SYSTEM OUTPUT	CC-Sys CC: High = 29 , Low = 28 CV-Sys Bot: 0.2v 0.4a 0w CV-Sys Top: 0.2v 0.3a 0w
3334 09/03/23 00:00:01 DAILY TEMPS	CC-Sys CC: High = 28 , Low = 27 CV-Sys Bot: 0.1v 0.6a 0w CV-Sys Top: 0.2v 0.3a 0w
3333 09/02/23 00:00:02 SYSTEM OUTPUT	CC-Sys CC: High = 29 , Low = 28 CV-Sys Bot: 0.2v 0.4a 0w CV-Sys Top: 0.2v 0.3a 0w
3332 09/02/23 00:00:02 SYSTEM OUTPUT	CC-Sys CC: High = 29 , Low = 28 CV-Sys Bot: 0.2v 0.4a 0w CV-Sys Top: 0.2v 0.3a 0w
3331 09/02/23 00:00:01 DAILY TEMPS	CC-Sys CC: High = 29 , Low = 28 CV-Sys Bot: 0.2v 0.4a 0w CV-Sys Top: 0.2v 0.3a 0w
3330 09/01/23 00:00:02 SYSTEM OUTPUT	CC-Sys CC: High = 30 , Low = 28 CV-Sys Bot: 0.2v 0.3a 0w CV-Sys Top: 0.2v 0.3a 0w
3329 09/01/23 00:00:02 SYSTEM OUTPUT	CC-Sys CC: High = 30 , Low = 28 CV-Sys Bot: 0.2v 0.3a 0w CV-Sys Top: 0.2v 0.3a 0w
3328 09/01/23 00:00:01 DAILY TEMPS	CC-Sys CC: High = 30 , Low = 28 CV-Sys Bot: 0.2v 0.3a 0w CV-Sys Top: 0.2v 0.3a 0w
3327 08/31/23 12:49:49 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.3a 0w CV-Sys Top: 0.2v 0.0a 0w
3326 08/31/23 12:49:49 SYSTEM OUTPUT	CV-Sys Bot: 0.1v 0.7a 0w CV-Sys Top: 0.2v 0.3a 0w
3325 08/31/23 12:34:49 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.3a 0w CV-Sys Top: 0.2v 0.3a 0w
3324 08/31/23 12:34:49 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.3a 0w CV-Sys Top: 0.4v 0.2a 0w
3323 08/31/23 12:19:49 SYSTEM OUTPUT	CV-Sys Bot: 0.8v 0.4a 0w CV-Sys Top: 22.2v 0.3a 6w
3322 08/31/23 12:19:49 SYSTEM OUTPUT	CV-Sys Days To Next Exer: 15 CV-Sys T: 697 983 17.3
3321 08/31/23 12:04:49 SYSTEM OUTPUT	CV-Sys B: 699 995 17.0 CV-Sys O: 1230 1687 # 82
3320 08/31/23 12:04:49 SYSTEM OUTPUT	CV-Sys 24:23h 13.09kh 536.67w
3319 08/31/23 11:49:49 RUN END DATA	CV-Sys
3318 08/31/23 11:49:49 RUN END DATA	CV-Sys 20.8v 48.7c 28.5c
3317 08/31/23 11:49:49 RUN END DATA	CV-Sys Min O/T/B: 48w 71w 65w
3316 08/31/23 11:49:49 RUN END DATA	CV-Sys Max O/T/B: 1649w 972w 990w
3315 08/31/23 11:49:49 RUN END DATA	CV-Sys Bot: 20.8v 3.3a 69w
3314 08/31/23 11:49:49 CONTACT STOP	CV-Sys Top: 20.8v 3.4a 71w
3313 08/31/23 11:49:49 SYSTEM OUTPUT	CV-Sys out: 52.6v 1.0a 51.6w
3312 08/31/23 11:49:49 SYSTEM OUTPUT	CV-Sys 17.5v 56.2c 54.3c
3311 08/31/23 11:49:48 SYSTEM OUTPUT	CV-Sys Min O/T/B: 825w 452w 441w
3310 08/31/23 11:49:48 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1660w 975w 983w
3309 08/31/23 11:49:48 SYSTEM OUTPUT	CV-Sys Bot: 17.5v 28.7a 502w
3308 08/31/23 11:49:48 SYSTEM OUTPUT	CV-Sys Top: 17.5v 29.2a 511w
3307 08/31/23 11:42:40 SYSTEM OUTPUT	CV-Sys out: 52.6v 17.5a 921.1w
3306 08/31/23 11:42:40 SYSTEM OUTPUT	CV-Sys 16.8v 56.5c 55.9c
3305 08/31/23 11:42:40 SYSTEM OUTPUT	CV-Sys Min O/T/B: 829w 450w 443w
3304 08/31/23 11:42:40 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1649w 980w 985w
3303 08/31/23 11:42:40 SYSTEM OUTPUT	CV-Sys Bot: 16.8v 33.2a 558w
3302 08/31/23 11:42:40 SYSTEM OUTPUT	CV-Sys Top: 16.8v 34.2a 575w
3301 08/31/23 11:27:40 SYSTEM OUTPUT	CV-Sys out: 52.8v 18.0a 948.7w
3300 08/31/23 11:27:40 SYSTEM OUTPUT	CV-Sys 16.9v 56.3c 64.0c
3299 08/31/23 11:27:40 SYSTEM OUTPUT	CV-Sys Min O/T/B: 826w 450w 443w
3298 08/31/23 11:27:40 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1645w 982w 990w
3297 08/31/23 11:27:40 SYSTEM OUTPUT	CV-Sys Bot: 16.9v 55.3a 936w
3296 08/31/23 11:27:40 SYSTEM OUTPUT	CV-Sys Top: 16.9v 53.9a 912w
3295 08/31/23 11:12:40 SYSTEM OUTPUT	CV-Sys out: 52.3v 29.8a 1559.2w
3294 08/31/23 11:12:40 SYSTEM OUTPUT	CV-Sys 16.5v 56.1c 60.5c
3293 08/31/23 11:12:40 SYSTEM OUTPUT	CV-Sys Min O/T/B: 829w 447w 448w
3292 08/31/23 11:12:40 SYSTEM OUTPUT	
3291 08/31/23 11:12:40 SYSTEM OUTPUT	
3290 08/31/23 11:12:40 SYSTEM OUTPUT	
3289 08/31/23 10:57:40 SYSTEM OUTPUT	
3288 08/31/23 10:57:40 SYSTEM OUTPUT	

3287 08/31/23 10:57:40 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1644w 967w 994w
3286 08/31/23 10:57:40 SYSTEM OUTPUT	CV-Sys Bot: 16.5v 48.8a 802w
3285 08/31/23 10:57:40 SYSTEM OUTPUT	CV-Sys Top: 16.5v 47.4a 779w
3284 08/31/23 10:57:40 SYSTEM OUTPUT	CV-Sys out: 52.1v 29.1a 1518.8w
3283 08/31/23 10:42:40 SYSTEM OUTPUT	CV-Sys 17.1v 56.5c 54.2c
3282 08/31/23 10:42:40 SYSTEM OUTPUT	CV-Sys Min O/T/B: 829w 451w 444w
3281 08/31/23 10:42:40 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1642w 969w 983w
3280 08/31/23 10:42:40 SYSTEM OUTPUT	CV-Sys Bot: 17.1v 28.6a 489w
3279 08/31/23 10:42:40 SYSTEM OUTPUT	CV-Sys Top: 17.1v 29.0a 497w
3278 08/31/23 10:42:40 SYSTEM OUTPUT	CV-Sys out: 52.6v 16.9a 890.6w
3277 08/31/23 10:27:40 SYSTEM OUTPUT	CV-Sys 17.5v 56.2c 57.0c
3276 08/31/23 10:27:40 SYSTEM OUTPUT	CV-Sys Min O/T/B: 836w 452w 451w
3275 08/31/23 10:27:40 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1663w 977w 972w
3274 08/31/23 10:27:40 SYSTEM OUTPUT	CV-Sys Bot: 17.5v 36.7a 641w
3273 08/31/23 10:27:40 SYSTEM OUTPUT	CV-Sys Top: 17.5v 37.9a 661w
3272 08/31/23 10:27:40 SYSTEM OUTPUT	CV-Sys out: 52.8v 19.6a 1034.7w
3271 08/31/23 10:12:40 SYSTEM OUTPUT	CV-Sys 17.1v 56.0c 64.4c
3270 08/31/23 10:12:40 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
3269 08/31/23 10:12:40 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1687w 977w 995w
3268 08/31/23 10:12:40 SYSTEM OUTPUT	CV-Sys Bot: 17.1v 55.9a 953w
3267 08/31/23 10:12:40 SYSTEM OUTPUT	CV-Sys Top: 17.1v 54.6a 932w
3266 08/31/23 10:12:40 SYSTEM OUTPUT	CV-Sys out: 51.8v 30.9a 1597.9w
3265 08/31/23 09:57:40 SYSTEM RUNNING	CV-Sys
3264 08/31/23 09:57:37 START UP DATA	CV-Sys Top/Bot OCV: 22.50v 22.06v
3263 08/31/23 09:57:31 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
3262 08/31/23 09:57:31 START UP DATA	CV-Sys Alarms: 0000000000000000
3261 08/31/23 09:57:31 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
3260 08/31/23 09:57:31 START UP DATA	CV-Sys FID = CC:02.07.08
3259 08/31/23 09:57:31 START UP DATA	CV-Sys LVS= 47.9,2,52.5,29.4
3258 08/31/23 09:57:31 START UP DATA	CV-Sys 53.8v,1408p,3.06v,3.06v
3257 08/31/23 09:57:31 CONTACT START	CV-Sys Contact SN: PPS23249002
3256 08/31/23 09:52:23 SYSTEM OUTPUT	CV-Sys Bot: 0.1v 0.7a 0w
3255 08/31/23 09:52:23 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.4a 0w
3254 08/31/23 09:37:23 SYSTEM OUTPUT	CV-Sys Bot: 0.1v 0.5a 0w
3253 08/31/23 09:37:23 SYSTEM OUTPUT	CV-Sys Top: 0.4v 0.5a 0w
3252 08/31/23 09:22:23 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.5a 0w
3251 08/31/23 09:22:23 SYSTEM OUTPUT	CV-Sys Top: 9.1v 0.4a 3w
3250 08/31/23 09:07:23 SYSTEM OUTPUT	CV-Sys Bot: 4.2v 0.5a 2w
3249 08/31/23 09:07:23 SYSTEM OUTPUT	CV-Sys Top: 23.0v 0.3a 6w
3248 08/31/23 08:52:57 ALARM OFF	CV-Sys Mj,Lt H2 SensorLeak
3247 08/31/23 08:52:56 ALARM OFF	CV-Sys Mj,Rt H2 SensorLeak
3246 08/31/23 08:52:40 ALARM ON	CV-Sys Mj,Lt H2 SensorLeak
3245 08/31/23 08:52:36 ALARM ON	CV-Sys Mj,Rt H2 SensorLeak
3244 08/31/23 08:52:23 RUN END DATA	CV-Sys Days To Next Exer: 15
3243 08/31/23 08:52:23 RUN END DATA	CV-Sys T: 88 143 19.1
3242 08/31/23 08:52:23 RUN END DATA	CV-Sys B: 95 150 19.1
3241 08/31/23 08:52:23 RUN END DATA	CV-Sys O: 87 218 # 81
3240 08/31/23 08:52:23 RUN END DATA	CV-Sys 22:31h 10.79kh 479.09w
3239 08/31/23 08:52:23 CONTACT STOP	CV-Sys
3238 08/31/23 08:52:23 SYSTEM OUTPUT	CV-Sys 20.6v 29.7c 29.2c
3237 08/31/23 08:52:23 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
3236 08/31/23 08:52:23 SYSTEM OUTPUT	CV-Sys Max O/T/B: 219w 143w 150w
3235 08/31/23 08:52:23 SYSTEM OUTPUT	CV-Sys Bot: 20.5v 3.2a 75w

Major alarm h2 sensors leaking

3234 08/31/23 08:52:23 SYSTEM OUTPUT	CV-Sys Top: 20.5v 3.2a 76w
3233 08/31/23 08:52:23 SYSTEM OUTPUT	CV-Sys out: 52.6v 0.6a 31.0w
3232 08/31/23 08:43:13 SYSTEM OUTPUT	CV-Sys 20.4v 29.5c 30.4c R
3231 08/31/23 08:43:13 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
3230 08/31/23 08:43:13 SYSTEM OUTPUT	CV-Sys Max O/T/B: 313w 183w 180w
3229 08/31/23 08:43:13 SYSTEM OUTPUT	CV-Sys Bot: 20.5v 3.7a 94w R
3228 08/31/23 08:43:13 SYSTEM OUTPUT	CV-Sys Top: 20.2v 4.1a 82w R
3227 08/31/23 08:43:13 SYSTEM OUTPUT	CV-Sys out: 52.7v 1.5a 80.9w R
3226 08/31/23 08:31:49 SYSTEM RUNNING	CV-Sys
3225 08/31/23 08:31:46 START UP DATA	CV-Sys Top/Bot OCV: 23.60v 23.17v
3224 08/31/23 08:31:40 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
3223 08/31/23 08:31:40 START UP DATA	CV-Sys Alarms: 0000000000000000
3222 08/31/23 08:31:40 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
3221 08/31/23 08:31:40 START UP DATA	CV-Sys FID = CC:02.07.08
3220 08/31/23 08:31:40 START UP DATA	CV-Sys LVS= 47.9,2,52.5,27.1
3219 08/31/23 08:31:40 START UP DATA	CV-Sys 53.7v,1419p,3.05v,3.06v
3218 08/31/23 08:31:40 CONTACT START	CV-Sys Contact SN: PPS23249002
3217 08/31/23 08:31:20 USER LOGGED IN	WEB ADMIN1
3216 08/31/23 08:31:10 USER LOGGED OUT	WEB ADMIN1
3215 08/31/23 08:31:07 USER LOGGED OUT	WEB ADMIN1
3214 08/31/23 00:00:02 SYSTEM OUTPUT	CV-Sys Bot: 0.1v 0.5a 0w
3213 08/31/23 00:00:02 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.2a 0w
3212 08/31/23 00:00:01 DAILY TEMPS	CC-Sys CC: High = 31 , Low = 28
3211 08/30/23 00:00:02 SYSTEM OUTPUT	CV-Sys Bot: 0.1v 0.6a 0w
3210 08/30/23 00:00:02 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.4a 0w
3209 08/30/23 00:00:01 DAILY TEMPS	CC-Sys CC: High = 29 , Low = 28
3208 08/29/23 00:00:02 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.5a 0w
3207 08/29/23 00:00:02 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.1a 0w
3206 08/29/23 00:00:01 DAILY TEMPS	CC-Sys CC: High = 29 , Low = 28
3205 08/28/23 00:00:02 SYSTEM OUTPUT	CV-Sys Bot: 0.1v 0.6a 0w
3204 08/28/23 00:00:02 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.3a 0w
3203 08/28/23 00:00:01 DAILY TEMPS	CC-Sys CC: High = 29 , Low = 28
3202 08/27/23 00:00:02 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.5a 0w
3201 08/27/23 00:00:02 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.2a 0w
3200 08/27/23 00:00:01 DAILY TEMPS	CC-Sys CC: High = 29 , Low = 28
3199 08/26/23 00:00:02 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.5a 0w
3198 08/26/23 00:00:02 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.2a 0w
3197 08/26/23 00:00:01 DAILY TEMPS	CC-Sys CC: High = 29 , Low = 28
3196 08/25/23 04:55:09 SYSTEM OUTPUT	CV-Sys Bot: 0.1v 0.7a 0w
3195 08/25/23 04:55:09 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.4a 0w
3194 08/25/23 04:40:09 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.3a 0w
3193 08/25/23 04:40:09 SYSTEM OUTPUT	CV-Sys Top: 0.3v 0.1a 0w
3192 08/25/23 04:25:09 SYSTEM OUTPUT	CV-Sys Bot: 0.3v 0.7a 0w
3191 08/25/23 04:25:09 SYSTEM OUTPUT	CV-Sys Top: 0.9v 0.3a 0w
3190 08/25/23 04:10:09 SYSTEM OUTPUT	CV-Sys Bot: 12.5v 0.6a 7w
3189 08/25/23 04:10:09 SYSTEM OUTPUT	CV-Sys Top: 22.7v 0.1a 3w
3188 08/25/23 03:56:01 NOTIFICATION OFF	CV-Sys Nt,LowH2 Detect, Lt 2.46
3187 08/25/23 03:56:00 NOTIFICATION ON	CV-Sys Nt,LowH2 Detect, Lt 2.45
3186 08/25/23 03:55:58 NOTIFICATION OFF	CV-Sys Nt,LowH2 Detect, Rt 2.46
3185 08/25/23 03:55:55 NOTIFICATION ON	CV-Sys Nt,LowH2 Detect, Rt 2.44
3184 08/25/23 03:55:09 RUN END DATA	CV-Sys Days To Next Exer: 21
3183 08/25/23 03:55:09 RUN END DATA	CV-Sys T: 51 77 21.0
3182 08/25/23 03:55:09 RUN END DATA	CV-Sys B: 59 90 20.7

3181 08/25/23 03:55:09 RUN END DATA	CV-Sys O: 26 38 # 80
3180 08/25/23 03:55:09 RUN END DATA	CV-Sys 22:11h 10.76kh 484.93w
3179 08/25/23 03:55:09 AUTO EXERCISE STOP	CV-Sys
3178 08/25/23 03:55:09 SYSTEM OUTPUT	CV-Sys 21.0v 27.0c 27.2c
3177 08/25/23 03:55:09 SYSTEM OUTPUT	CV-Sys Min O/T/B: 13w 38w 42w
3176 08/25/23 03:55:09 SYSTEM OUTPUT	CV-Sys Max O/T/B: 39w 72w 82w
3175 08/25/23 03:55:09 SYSTEM OUTPUT	CV-Sys Bot: 21.0v 3.0a 63w
3174 08/25/23 03:55:09 SYSTEM OUTPUT	CV-Sys Top: 20.9v 2.4a 49w
3173 08/25/23 03:55:09 SYSTEM OUTPUT	CV-Sys out: 55.1v 0.4a 22.8w
3172 08/25/23 03:55:09 EXERCISE DATE CHG	CV-Sys Reset, Exercise Completed
3171 08/25/23 03:45:09 SYSTEM OUTPUT	CV-Sys 20.8v 26.8c 28.5c
3170 08/25/23 03:45:09 SYSTEM OUTPUT	CV-Sys Min O/T/B: 7w 35w 40w
3169 08/25/23 03:45:09 SYSTEM OUTPUT	CV-Sys Max O/T/B: 41w 76w 81w
3168 08/25/23 03:45:09 SYSTEM OUTPUT	CV-Sys Bot: 20.8v 3.5a 72w
3167 08/25/23 03:45:09 SYSTEM OUTPUT	CV-Sys Top: 20.8v 3.2a 66w
3166 08/25/23 03:45:09 SYSTEM OUTPUT	CV-Sys out: 55.1v 0.4a 22.3w
3165 08/25/23 03:30:09 SYSTEM OUTPUT	CV-Sys 20.9v 27.2c 27.3c
3164 08/25/23 03:30:09 SYSTEM OUTPUT	CV-Sys Min O/T/B: 12w 35w 43w
3163 08/25/23 03:30:09 SYSTEM OUTPUT	CV-Sys Max O/T/B: 39w 73w 81w
3162 08/25/23 03:30:09 SYSTEM OUTPUT	CV-Sys Bot: 20.9v 3.0a 62w
3161 08/25/23 03:30:09 SYSTEM OUTPUT	CV-Sys Top: 21.0v 2.5a 53w
3160 08/25/23 03:30:09 SYSTEM OUTPUT	CV-Sys out: 55.0v 0.6a 30.6w
3159 08/25/23 03:15:09 SYSTEM OUTPUT	CV-Sys 20.9v 27.2c 27.0c
3158 08/25/23 03:15:09 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
3157 08/25/23 03:15:09 SYSTEM OUTPUT	CV-Sys Max O/T/B: 39w 74w 90w
3156 08/25/23 03:15:09 SYSTEM OUTPUT	CV-Sys Bot: 20.9v 3.0a 62w
3155 08/25/23 03:15:09 SYSTEM OUTPUT	CV-Sys Top: 20.9v 2.2a 45w
3154 08/25/23 03:15:09 SYSTEM OUTPUT	CV-Sys out: 55.0v 0.4a 23.6w
3153 08/25/23 03:00:09 SYSTEM EXERCISING	CV-Sys
3152 08/25/23 03:00:06 START UP DATA	CV-Sys Top/Bot OCV: 23.04v 22.99v
3151 08/25/23 03:00:00 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
3150 08/25/23 03:00:00 START UP DATA	CV-Sys Alarms: 0000000000000000
3149 08/25/23 03:00:00 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
3148 08/25/23 03:00:00 START UP DATA	CV-Sys FID = CC:02.07.08
3147 08/25/23 03:00:00 START UP DATA	CV-Sys LVS= 47.9,2,52.5,27.5
3146 08/25/23 03:00:00 START UP DATA	CV-Sys 54.5v,1434p,3.02v,3.04v
3145 08/25/23 03:00:00 AUTO EXERCISE START	CV-Sys Exercise SN: PPS23249002
3144 08/25/23 00:00:02 SYSTEM OUTPUT	CV-Sys Bot: 0.1v 0.5a 0w
3143 08/25/23 00:00:02 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.3a 0w
3142 08/25/23 00:00:01 DAILY TEMPS	CC-Sys CC: High = 30 , Low = 28
3141 08/24/23 13:29:33 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.4a 0w
3140 08/24/23 13:29:33 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.2a 0w
3139 08/24/23 13:14:33 SYSTEM OUTPUT	CV-Sys Bot: 0.1v 0.4a 0w
3138 08/24/23 13:14:33 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.2a 0w
3137 08/24/23 12:59:33 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.3a 0w
3136 08/24/23 12:59:33 SYSTEM OUTPUT	CV-Sys Top: 0.5v 0.2a 0w
3135 08/24/23 12:44:33 SYSTEM OUTPUT	CV-Sys Bot: 1.0v 0.4a 0w
3134 08/24/23 12:44:33 SYSTEM OUTPUT	CV-Sys Top: 22.5v 0.2a 5w
3133 08/24/23 12:29:33 RUN END DATA	CV-Sys Days To Next Exer: 1
3132 08/24/23 12:29:33 RUN END DATA	CV-Sys T: 608 936 17.8
3131 08/24/23 12:29:33 RUN END DATA	CV-Sys B: 620 946 16.5
3130 08/24/23 12:29:33 RUN END DATA	CV-Sys O: 1084 1650 # 79
3129 08/24/23 12:29:33 RUN END DATA	CV-Sys 21:16h 10.74kh 504.69w

3128 08/24/23 12:29:33 CONTACT STOP	CV-Sys
3127 08/24/23 12:29:33 SYSTEM OUTPUT	CV-Sys 21.1v 49.5c 27.7c
3126 08/24/23 12:29:33 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
3125 08/24/23 12:29:33 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1656w 936w 945w
3124 08/24/23 12:29:33 SYSTEM OUTPUT	CV-Sys Bot: 21.2v 2.7a 66w
3123 08/24/23 12:29:33 SYSTEM OUTPUT	CV-Sys Top: 21.2v 2.9a 55w
3122 08/24/23 12:29:33 SYSTEM OUTPUT	CV-Sys out: 51.9v 0.8a 39.0w
3121 08/24/23 12:24:03 SYSTEM RUNNING	CV-Sys
3120 08/24/23 12:24:00 START UP DATA	CV-Sys Top/Bot OCV: 22.27v 22.35v
3119 08/24/23 12:23:54 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
3118 08/24/23 12:23:54 START UP DATA	CV-Sys Alarms: 0000000000000000
3117 08/24/23 12:23:54 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
3116 08/24/23 12:23:54 START UP DATA	CV-Sys FID = CC:02.07.08
3115 08/24/23 12:23:54 START UP DATA	CV-Sys LVS= 47.9,2,52.5,29.1
3114 08/24/23 12:23:54 START UP DATA	CV-Sys 52.0v,1439p,2.23v,2.40v
3113 08/24/23 12:23:54 CONTACT START	CV-Sys Contact SN: PPS23249002
3112 08/24/23 12:23:23 RUN END DATA	CV-Sys Days To Next Exer: 1
3111 08/24/23 12:23:23 RUN END DATA	CV-Sys T: 74 129 19.2
3110 08/24/23 12:23:23 RUN END DATA	CV-Sys B: 84 145 19.2
3109 08/24/23 12:23:23 RUN END DATA	CV-Sys O: 83 195 # 78
3108 08/24/23 12:23:23 RUN END DATA	CV-Sys 21:11h 10.64kh 502.20w
3107 08/24/23 12:23:23 CONTACT STOP	CV-Sys
3106 08/24/23 12:23:23 SYSTEM OUTPUT	CV-Sys 20.8v 29.2c 27.6c
3105 08/24/23 12:23:23 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
3104 08/24/23 12:23:23 SYSTEM OUTPUT	CV-Sys Max O/T/B: 194w 129w 145w
3103 08/24/23 12:23:23 SYSTEM OUTPUT	CV-Sys Bot: 20.8v 2.8a 61w
3102 08/24/23 12:23:22 SYSTEM OUTPUT	CV-Sys Top: 20.8v 2.8a 72w
3101 08/24/23 12:23:22 SYSTEM OUTPUT	CV-Sys out: 52.7v 0.7a 36.3w
3100 08/24/23 12:21:42 SYSTEM RUNNING	CV-Sys
3099 08/24/23 12:21:39 START UP DATA	CV-Sys Top/Bot OCV: 21.52v 21.68v
3098 08/24/23 12:21:34 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
3097 08/24/23 12:21:13 START UP DATA	CV-Sys Alarms: 0000000000000000
3096 08/24/23 12:21:13 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
3095 08/24/23 12:21:13 START UP DATA	CV-Sys FID = CC:02.07.08
3094 08/24/23 12:21:13 START UP DATA	CV-Sys LVS= 47.9,2,52.5,29.5
3093 08/24/23 12:21:13 START UP DATA	CV-Sys 52.8v,1442p,2.76v,2.35v
3092 08/24/23 12:21:13 CONTACT START	CV-Sys Contact SN: PPS23249002
3091 08/24/23 12:21:12 ALARM OFF	CV-Sys Mj,Rt H2 SensorLeak
3090 08/24/23 12:21:11 SYSTEM RUN ENDED	CV-Sys
3089 08/24/23 12:21:10 WARNING	CV-Sys Mj,Rt H2 SensorLeak
3088 08/24/23 12:21:10 SYSTEM RUN ENDED	CV-Sys
3087 08/24/23 12:21:10 ALARM ON	CV-Sys Mj,Rt H2 SensorLeak
3086 08/24/23 12:21:05 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
3085 08/24/23 12:20:44 START UP DATA	CV-Sys Alarms: 0000000000000000
3084 08/24/23 12:20:44 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
3083 08/24/23 12:20:44 START UP DATA	CV-Sys FID = CC:02.07.08
3082 08/24/23 12:20:44 START UP DATA	CV-Sys LVS= 47.9,2,52.5,29.7
3081 08/24/23 12:20:44 START UP DATA	CV-Sys 53.4v,1442p,2.13v,2.28v
3080 08/24/23 12:20:44 CONTACT START	CV-Sys Contact SN: PPS23249002
3079 08/24/23 12:20:43 ALARM OFF	CV-Sys Mj,Lt H2 SensorLeak
3078 08/24/23 12:20:36 ALARM ON	CV-Sys Mj,Lt H2 SensorLeak
3077 08/24/23 12:20:14 RUN END DATA	CV-Sys Days To Next Exer: 1
3076 08/24/23 12:20:14 RUN END DATA	CV-Sys T: 71 103 20.3

3075 08/24/23 12:20:14 RUN END DATA	CV-Sys B: 76 112 20.1
3074 08/24/23 12:20:14 RUN END DATA	CV-Sys O: 57 82 # 77
3073 08/24/23 12:20:14 RUN END DATA	CV-Sys 21:09h 10.63kh 502.73w
3072 08/24/23 12:20:14 CONTACT STOP	CV-Sys
3071 08/24/23 12:20:13 SYSTEM OUTPUT	CV-Sys 20.8v 29.6c 28.6c
3070 08/24/23 12:20:13 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
3069 08/24/23 12:20:13 SYSTEM OUTPUT	CV-Sys Max O/T/B: 86w 103w 112w
3068 08/24/23 12:20:13 SYSTEM OUTPUT	CV-Sys Bot: 20.8v 3.2a 80w
3067 08/24/23 12:20:13 SYSTEM OUTPUT	CV-Sys Top: 20.8v 2.6a 59w
3066 08/24/23 12:20:13 SYSTEM OUTPUT	CV-Sys out: 52.7v 0.9a 46.2w
3065 08/24/23 12:11:18 SYSTEM RUNNING	CV-Sys
3064 08/24/23 12:11:15 START UP DATA	CV-Sys Top/Bot OCV: 22.66v 22.54v
3063 08/24/23 12:11:09 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
3062 08/24/23 12:11:09 START UP DATA	CV-Sys Alarms: 0000000000000000
3061 08/24/23 12:11:09 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
3060 08/24/23 12:11:09 START UP DATA	CV-Sys FID = CC:02.07.08
3059 08/24/23 12:11:09 START UP DATA	CV-Sys LVS= 47.9,2,52.5,29.9
3058 08/24/23 12:11:09 START UP DATA	CV-Sys 54.4v,1446p,3.02v,3.03v
3057 08/24/23 12:11:09 CONTACT START	CV-Sys Contact SN: PPS23249002
3056 08/24/23 12:10:45 USER LOGGED IN	WEB ADMIN1
3055 08/24/23 12:10:37 USER LOGGED OUT	WEB ADMIN1
3054 08/24/23 12:10:11 USER LOGGED OUT	WEB ADMIN1
3053 08/24/23 11:35:41 SYSTEM OUTPUT	CV-Sys Bot: 0.1v 0.4a 0w
3052 08/24/23 11:35:41 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.2a 0w
3051 08/24/23 11:20:41 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.5a 0w
3050 08/24/23 11:20:41 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.4a 0w
3049 08/24/23 11:05:41 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.3a 0w
3048 08/24/23 11:05:41 SYSTEM OUTPUT	CV-Sys Top: 0.7v 0.1a 0w
3047 08/24/23 10:50:41 SYSTEM OUTPUT	CV-Sys Bot: 3.1v 0.4a 1w
3046 08/24/23 10:50:41 SYSTEM OUTPUT	CV-Sys Top: 22.6v 0.2a 5w
3045 08/24/23 10:35:41 RUN END DATA	CV-Sys Days To Next Exer: 1
3044 08/24/23 10:35:41 RUN END DATA	CV-Sys T: 498 894 16.0
3043 08/24/23 10:35:41 RUN END DATA	CV-Sys B: 518 920 17.6
3042 08/24/23 10:35:41 RUN END DATA	CV-Sys O: 905 1652 # 76
3041 08/24/23 10:35:41 RUN END DATA	CV-Sys 21:00h 10.63kh 505.90w
3040 08/24/23 10:35:41 CONTACT STOP	CV-Sys
3039 08/24/23 10:35:41 SYSTEM OUTPUT	CV-Sys 20.9v 44.2c 28.0c
3038 08/24/23 10:35:41 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
3037 08/24/23 10:35:41 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1659w 894w 919w
3036 08/24/23 10:35:41 SYSTEM OUTPUT	CV-Sys Bot: 21.0v 3.4a 74w
3035 08/24/23 10:35:41 SYSTEM OUTPUT	CV-Sys Top: 21.0v 2.8a 55w
3034 08/24/23 10:35:41 SYSTEM OUTPUT	CV-Sys out: 51.3v 0.9a 44.0w
3033 08/24/23 10:32:56 SYSTEM RUNNING	CV-Sys
3032 08/24/23 10:32:53 START UP DATA	CV-Sys Top/Bot OCV: 21.76v 22.03v
3031 08/24/23 10:32:47 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
3030 08/24/23 10:32:31 START UP DATA	CV-Sys Alarms: 0000000000000000
3029 08/24/23 10:32:31 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
3028 08/24/23 10:32:31 START UP DATA	CV-Sys FID = CC:02.07.08
3027 08/24/23 10:32:31 START UP DATA	CV-Sys LVS= 47.9,2,52.5,30.7
3026 08/24/23 10:32:31 START UP DATA	CV-Sys 52.4v,1445p,2.23v,2.22v
3025 08/24/23 10:32:31 CONTACT START	CV-Sys Contact SN: PPS23249002
3024 08/24/23 10:32:25 ALARM OFF	CV-Sys Mj,Rt H2 SensorLeak
3023 08/24/23 10:32:24 ALARM OFF	CV-Sys Mj,Lt H2 SensorLeak

3022 08/24/23 10:31:56 ALARM ON	CV-Sys MJ,Lt H2 SensorLeak
3021 08/24/23 10:31:52 ALARM ON	CV-Sys MJ,Rt H2 SensorLeak
3020 08/24/23 10:31:41 RUN END DATA	CV-Sys Days To Next Exer: 1
3019 08/24/23 10:31:41 RUN END DATA	CV-Sys T: 175 248 18.1
3018 08/24/23 10:31:41 RUN END DATA	CV-Sys B: 189 263 19.0
3017 08/24/23 10:31:41 RUN END DATA	CV-Sys O: 281 415 # 75
3016 08/24/23 10:31:41 RUN END DATA	CV-Sys 20:58h 10.58kh 505.01w
3015 08/24/23 10:31:41 CONTACT STOP	CV-Sys
3014 08/24/23 10:31:41 SYSTEM OUTPUT	CV-Sys 19.7v 30.3c 36.0c
3013 08/24/23 10:31:40 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
3012 08/24/23 10:31:40 SYSTEM OUTPUT	CV-Sys Max O/T/B: 415w 248w 262w
3011 08/24/23 10:31:40 SYSTEM OUTPUT	CV-Sys Bot: 19.8v 7.3a 138w
3010 08/24/23 10:31:40 SYSTEM OUTPUT	CV-Sys Top: 19.9v 7.4a 145w
3009 08/24/23 10:31:40 SYSTEM OUTPUT	CV-Sys out: 52.9v 4.1a 218.4w
3008 08/24/23 10:30:30 SYSTEM RUNNING	CV-Sys
3007 08/24/23 10:30:27 START UP DATA	CV-Sys Top/Bot OCV: 21.52v 21.85v
3006 08/24/23 10:30:21 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
3005 08/24/23 10:30:00 START UP DATA	CV-Sys Alarms: 0000000000000000
3004 08/24/23 10:30:00 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
3003 08/24/23 10:30:00 START UP DATA	CV-Sys FID = CC:02.07.08
3002 08/24/23 10:30:00 START UP DATA	CV-Sys LVS= 47.9,2,52.5,28.9
3001 08/24/23 10:30:00 START UP DATA	CV-Sys 50.0v,1448p,2.67v,2.65v
3000 08/24/23 10:30:00 CONTACT START	CV-Sys Contact SN: PPS23249002
2999 08/24/23 10:29:59 ALARM OFF	CV-Sys MJ,Rt H2 SensorLeak
2998 08/24/23 10:29:50 RUN END DATA	CV-Sys Days To Next Exer: 1
2997 08/24/23 10:29:50 RUN END DATA	CV-Sys T: 6 6 18.2
2996 08/24/23 10:29:50 RUN END DATA	CV-Sys B: 8 8 18.4
2995 08/24/23 10:29:50 RUN END DATA	CV-Sys O: 1169 0 # 74
2994 08/24/23 10:29:50 RUN END DATA	CV-Sys 20:56h 10.58kh 505.24w
2993 08/24/23 10:29:50 SYSTEM OUTPUT	CV-Sys 21.6v 28.8c 25.0c
2992 08/24/23 10:29:50 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
2991 08/24/23 10:29:50 SYSTEM OUTPUT	CV-Sys Max O/T/B: 0w 17w 15w
2990 08/24/23 10:29:50 SYSTEM OUTPUT	CV-Sys Bot: 21.4v 0.9a 8w
2989 08/24/23 10:29:50 SYSTEM OUTPUT	CV-Sys Top: 21.1v 1.4a 6w
2988 08/24/23 10:29:50 SYSTEM OUTPUT	CV-Sys out: 48.4v 1.7a 82.5w
2987 08/24/23 10:29:50 SYSTEM RUN ENDED	CV-Sys
2986 08/24/23 10:29:50 ALARM ON	CV-Sys MJ,Rt H2 SensorLeak
2985 08/24/23 10:29:49 SYSTEM RUNNING	CV-Sys
2984 08/24/23 10:29:46 START UP DATA	CV-Sys Top/Bot OCV: 20.95v 21.04v
2983 08/24/23 10:29:41 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2982 08/24/23 10:29:20 START UP DATA	CV-Sys Alarms: 0000000000000000
2981 08/24/23 10:29:20 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2980 08/24/23 10:29:20 START UP DATA	CV-Sys FID = CC:02.07.08
2979 08/24/23 10:29:20 START UP DATA	CV-Sys LVS= 47.9,2,52.5,29.1
2978 08/24/23 10:29:20 START UP DATA	CV-Sys 48.8v,1448p,2.84v,2.31v
2977 08/24/23 10:29:20 CONTACT START	CV-Sys Contact SN: PPS23249002
2976 08/24/23 10:29:19 ALARM OFF	CV-Sys MJ,Rt H2 SensorLeak
2975 08/24/23 10:29:16 SYSTEM RUN ENDED	CV-Sys
2974 08/24/23 10:29:16 WARNING	CV-Sys MJ,Rt H2 SensorLeak
2973 08/24/23 10:29:16 SYSTEM RUN ENDED	CV-Sys
2972 08/24/23 10:29:16 ALARM ON	CV-Sys MJ,Rt H2 SensorLeak
2971 08/24/23 10:29:11 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2970 08/24/23 10:28:50 START UP DATA	CV-Sys Alarms: 0000000000000000

2969 08/24/23 10:28:50 START UP DATA CV-Sys FID = E11CV:02.07.08.TM
 2968 08/24/23 10:28:50 START UP DATA CV-Sys FID = CC:02.07.08
 2967 08/24/23 10:28:50 START UP DATA CV-Sys LVS= 47.9,2,52.5,29.0
 2966 08/24/23 10:28:50 START UP DATA CV-Sys 48.7v,1449p,2.78v,2.22v
 2965 08/24/23 10:28:50 CONTACT START CV-Sys Contact SN: PPS23249002
 2964 08/24/23 10:28:49 ALARM OFF CV-Sys MJ,Rt H2 SensorLeak
 2963 08/24/23 10:28:45 SYSTEM RUN ENDED CV-Sys
 2962 08/24/23 10:28:45 WARNING CV-Sys MJ,Rt H2 SensorLeak
 2961 08/24/23 10:28:45 SYSTEM RUN ENDED CV-Sys
 2960 08/24/23 10:28:45 ALARM ON CV-Sys MJ,Rt H2 SensorLeak
 2959 08/24/23 10:28:40 SYSTEM START ATTEMPT CV-Sys Bot/Top Modules
 2958 08/24/23 10:28:19 START UP DATA CV-Sys Alarms: 0000000000000000
 2957 08/24/23 10:28:19 START UP DATA CV-Sys FID = E11CV:02.07.08.TM
 2956 08/24/23 10:28:19 START UP DATA CV-Sys FID = CC:02.07.08
 2955 08/24/23 10:28:19 START UP DATA CV-Sys LVS= 47.9,2,52.5,29.0
 2954 08/24/23 10:28:19 START UP DATA CV-Sys 48.3v,1449p,2.79v,2.25v
 2953 08/24/23 10:28:19 CONTACT START CV-Sys Contact SN: PPS23249002
 2952 08/24/23 10:28:17 ALARM OFF CV-Sys MJ,Rt H2 SensorLeak
 2951 08/24/23 10:28:14 SYSTEM RUN ENDED CV-Sys
 2950 08/24/23 10:28:14 WARNING CV-Sys MJ,Rt H2 SensorLeak
 2949 08/24/23 10:28:14 SYSTEM RUN ENDED CV-Sys
 2948 08/24/23 10:28:14 ALARM ON CV-Sys MJ,Rt H2 SensorLeak
 2947 08/24/23 10:28:09 SYSTEM START ATTEMPT CV-Sys Bot/Top Modules
 2946 08/24/23 10:27:48 START UP DATA CV-Sys Alarms: 0000000000000000
 2945 08/24/23 10:27:48 START UP DATA CV-Sys FID = E11CV:02.07.08.TM
 2944 08/24/23 10:27:48 START UP DATA CV-Sys FID = CC:02.07.08
 2943 08/24/23 10:27:48 START UP DATA CV-Sys LVS= 47.9,2,52.5,29.2
 2942 08/24/23 10:27:48 START UP DATA CV-Sys 49.1v,1450p,2.77v,2.21v
 2941 08/24/23 10:27:48 CONTACT START CV-Sys Contact SN: PPS23249002
 2940 08/24/23 10:27:47 ALARM OFF CV-Sys MJ,Rt H2 SensorLeak
 2939 08/24/23 10:27:43 SYSTEM RUN ENDED CV-Sys
 2938 08/24/23 10:27:43 WARNING CV-Sys MJ,Rt H2 SensorLeak
 2937 08/24/23 10:27:43 SYSTEM RUN ENDED CV-Sys
 2936 08/24/23 10:27:43 ALARM ON CV-Sys MJ,Rt H2 SensorLeak
 2935 08/24/23 10:27:38 SYSTEM START ATTEMPT CV-Sys Bot/Top Modules
 2934 08/24/23 10:27:17 START UP DATA CV-Sys Alarms: 0000000000000000
 2933 08/24/23 10:27:17 START UP DATA CV-Sys FID = E11CV:02.07.08.TM
 2932 08/24/23 10:27:17 START UP DATA CV-Sys FID = CC:02.07.08
 2931 08/24/23 10:27:17 START UP DATA CV-Sys LVS= 47.9,2,52.5,29.2
 2930 08/24/23 10:27:17 START UP DATA CV-Sys 48.3v,1450p,2.79v,2.28v
 2929 08/24/23 10:27:17 CONTACT START CV-Sys Contact SN: PPS23249002
 2928 08/24/23 10:27:16 ALARM OFF CV-Sys MJ,Rt H2 SensorLeak
 2927 08/24/23 10:27:14 SYSTEM RUN ENDED CV-Sys
 2926 08/24/23 10:27:14 WARNING CV-Sys MJ,Rt H2 SensorLeak
 2925 08/24/23 10:27:14 SYSTEM RUN ENDED CV-Sys
 2924 08/24/23 10:27:14 ALARM ON CV-Sys MJ,Rt H2 SensorLeak
 2923 08/24/23 10:27:08 SYSTEM START ATTEMPT CV-Sys Bot/Top Modules
 2922 08/24/23 10:26:54 USER LOGGED IN WEB ADMIN1
 2921 08/24/23 10:26:47 START UP DATA CV-Sys Alarms: 0000000000000000
 2920 08/24/23 10:26:47 START UP DATA CV-Sys FID = E11CV:02.07.08.TM
 2919 08/24/23 10:26:47 START UP DATA CV-Sys FID = CC:02.07.08
 2918 08/24/23 10:26:47 START UP DATA CV-Sys LVS= 47.9,2,52.5,29.4
 2917 08/24/23 10:26:47 START UP DATA CV-Sys 48.8v,1449p,2.56v,2.60v

2916 08/24/23 10:26:47 CONTACT START	CV-Sys Contact SN: PPS23249002
2915 08/24/23 10:26:46 ALARM OFF	CV-Sys MJ,Rt H2 SensorLeak
2914 08/24/23 10:26:37 RUN END DATA	CV-Sys Days To Next Exer: 1
2913 08/24/23 10:26:37 RUN END DATA	CV-Sys T: 11 11 21.4
2912 08/24/23 10:26:37 RUN END DATA	CV-Sys B: 14 13 21.8
2911 08/24/23 10:26:37 RUN END DATA	CV-Sys O: 1169 0 # 73
2910 08/24/23 10:26:37 RUN END DATA	CV-Sys 20:56h 10.58kh 505.25w
2909 08/24/23 10:26:37 SYSTEM OUTPUT	CV-Sys 21.5v 29.3c 25.0c
2908 08/24/23 10:26:37 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
2907 08/24/23 10:26:37 SYSTEM OUTPUT	CV-Sys Max O/T/B: 0w 14w 14w
2906 08/24/23 10:26:37 SYSTEM OUTPUT	CV-Sys Bot: 21.4v 0.9a 13w
2905 08/24/23 10:26:37 SYSTEM OUTPUT	CV-Sys Top: 21.1v 1.1a 10w
2904 08/24/23 10:26:37 SYSTEM OUTPUT	CV-Sys out: 48.4v 0.4a 18.5w
2903 08/24/23 10:26:37 SYSTEM RUN ENDED	CV-Sys
2902 08/24/23 10:26:37 ALARM ON	CV-Sys MJ,Rt H2 SensorLeak
2901 08/24/23 10:26:36 SYSTEM RUNNING	CV-Sys
2900 08/24/23 10:26:33 START UP DATA	CV-Sys Top/Bot OCV: 21.38v 21.51v
2899 08/24/23 10:26:28 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2898 08/24/23 10:26:08 START UP DATA	CV-Sys Alarms: 0000000000000000
2897 08/24/23 10:26:08 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2896 08/24/23 10:26:08 START UP DATA	CV-Sys FID = CC:02.07.08
2895 08/24/23 10:26:08 START UP DATA	CV-Sys LVS= 47.9,2,52.5,29.1
2894 08/24/23 10:26:08 START UP DATA	CV-Sys 49.2v,1449p,1.96v,1.70v
2893 08/24/23 10:26:08 CONTACT START	CV-Sys Contact SN: PPS23249002
2892 08/24/23 10:26:03 SYSTEM OUTPUT	CV-Sys Bot: 22.3v 0.5a 0w
2891 08/24/23 10:26:03 SYSTEM OUTPUT	CV-Sys Top: 22.5v 0.2a 0w
2890 08/24/23 10:26:02 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
2889 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
2888 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48
2887 08/24/23 10:26:01 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48
2886 08/24/23 10:22:57 SYSTEM DE-ENERGIZED	CC-Sys
2885 08/24/23 10:22:36 ALARM OFF	CV-Sys MJ,Rt H2 SensorLeak
2884 08/24/23 10:22:32 SYSTEM RUN ENDED	CV-Sys
2883 08/24/23 10:22:32 WARNING	CV-Sys MJ,Rt H2 SensorLeak
2882 08/24/23 10:22:32 SYSTEM RUN ENDED	CV-Sys
2881 08/24/23 10:22:32 ALARM ON	CV-Sys MJ,Rt H2 SensorLeak
2880 08/24/23 10:22:27 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2879 08/24/23 10:22:15 START UP DATA	CV-Sys Alarms: 0000000000000000
2878 08/24/23 10:22:15 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2877 08/24/23 10:22:15 START UP DATA	CV-Sys FID = CC:02.07.08
2876 08/24/23 10:22:15 START UP DATA	CV-Sys LVS= 47.9,2,52.5,29.4
2875 08/24/23 10:22:15 START UP DATA	CV-Sys 51.7v,1449p,2.56v,2.58v
2874 08/24/23 10:22:15 REMOTE START	WEB Remote SN: PPS23249002
2873 08/24/23 10:22:05 ALARM OFF	CV-Sys MJ,Rt H2 SensorLeak
2872 08/24/23 10:22:02 SYSTEM RUN ENDED	CV-Sys
2871 08/24/23 10:22:02 WARNING	CV-Sys MJ,Rt H2 SensorLeak
2870 08/24/23 10:22:02 SYSTEM RUN ENDED	CV-Sys
2869 08/24/23 10:22:02 ALARM ON	CV-Sys MJ,Rt H2 SensorLeak
2868 08/24/23 10:21:55 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2867 08/24/23 10:21:55 START UP DATA	CV-Sys Alarms: 0000000000000000
2866 08/24/23 10:21:55 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2865 08/24/23 10:21:55 START UP DATA	CV-Sys FID = CC:02.07.08
2864 08/24/23 10:21:55 START UP DATA	CV-Sys LVS= 47.9,2,52.5,29.6

2863 08/24/23 10:21:55 START UP DATA	CV-Sys 51.8v,1451p,2.78v,2.78v
2862 08/24/23 10:21:55 REMOTE START	WEB Remote SN: PPS23249002
2861 08/24/23 10:21:40 USER LOGGED IN	WEB ADMIN1
2860 08/24/23 10:21:11 RUN END DATA	CV-Sys Days To Next Exer: 1
2859 08/24/23 10:21:11 RUN END DATA	CV-Sys T: 0 0 0.0
2858 08/24/23 10:21:11 RUN END DATA	CV-Sys B: 0 0 0.0
2857 08/24/23 10:21:11 RUN END DATA	CV-Sys O: 0 0 # 72
2856 08/24/23 10:21:11 RUN END DATA	CV-Sys 20:56h 10.58kh 505.26w
2855 08/24/23 10:21:11 CONTACT STOP	CV-Sys
2854 08/24/23 10:21:11 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2853 08/24/23 10:20:51 START UP DATA	CV-Sys Alarms: 0000000000000000
2852 08/24/23 10:20:51 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2851 08/24/23 10:20:51 START UP DATA	CV-Sys FID = CC:02.07.08
2850 08/24/23 10:20:51 START UP DATA	CV-Sys LVS= 47.9,2,52.5,28.9
2849 08/24/23 10:20:51 START UP DATA	CV-Sys 51.7v,1449p,2.51v,2.53v
2848 08/24/23 10:20:51 CONTACT START	CV-Sys Contact SN: PPS23249002
2847 08/24/23 10:20:46 SYSTEM OUTPUT	CV-Sys Bot: 22.3v 0.6a 0w
2846 08/24/23 10:20:46 SYSTEM OUTPUT	CV-Sys Top: 22.3v 0.4a 0w
2845 08/24/23 10:20:45 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
2844 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
2843 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x04
2842 08/24/23 10:20:44 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x04
2841 08/24/23 10:20:43 SYSTEM DE-ENERGIZED	CC-Sys
2840 08/24/23 10:20:25 RUN END DATA	CV-Sys Days To Next Exer: 1
2839 08/24/23 10:20:25 RUN END DATA	CV-Sys T: 0 0 0.0
2838 08/24/23 10:20:25 RUN END DATA	CV-Sys B: 0 0 0.0
2837 08/24/23 10:20:25 RUN END DATA	CV-Sys O: 0 0 # 71
2836 08/24/23 10:20:25 RUN END DATA	CV-Sys 20:56h 10.58kh 505.26w
2835 08/24/23 10:20:25 CONTACT STOP	CV-Sys
2834 08/24/23 10:20:25 SYSTEM RUNNING	CV-Sys
2833 08/24/23 10:20:22 START UP DATA	CV-Sys Top/Bot OCV: 21.48v 21.66v
2832 08/24/23 10:20:16 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2831 08/24/23 10:20:03 START UP DATA	CV-Sys Alarms: 0000000000000000
2830 08/24/23 10:20:03 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2829 08/24/23 10:20:03 START UP DATA	CV-Sys FID = CC:02.07.08
2828 08/24/23 10:20:03 START UP DATA	CV-Sys LVS= 47.9,2,52.5,28.9
2827 08/24/23 10:20:03 START UP DATA	CV-Sys 51.8v,1452p,2.71v,2.72v
2826 08/24/23 10:20:03 CONTACT START	CV-Sys Contact SN: PPS23249002
2825 08/24/23 10:19:51 SYSTEM OUTPUT	CV-Sys Bot: 22.3v 0.5a 0w
2824 08/24/23 10:19:51 SYSTEM OUTPUT	CV-Sys Top: 22.4v 0.4a 0w
2823 08/24/23 10:19:50 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
2822 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
2821 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x04
2820 08/24/23 10:19:50 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x04
2819 08/24/23 10:19:48 SYSTEM DE-ENERGIZED	CC-Sys
2818 08/24/23 10:19:27 START UP DATA	CV-Sys Alarms: 0000000000000000
2817 08/24/23 10:19:27 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2816 08/24/23 10:19:27 START UP DATA	CV-Sys FID = CC:02.07.08
2815 08/24/23 10:19:27 START UP DATA	CV-Sys LVS= 47.9,2,52.5,28.8
2814 08/24/23 10:19:27 START UP DATA	CV-Sys 52.1v,1451p,2.54v,2.54v
2813 08/24/23 10:19:27 CONTACT START	CV-Sys Contact SN: PPS23249002
2812 08/24/23 10:19:27 SYSTEM RUN ENDED	CV-Sys
2811 08/24/23 10:19:26 RUN END DATA	CV-Sys Days To Next Exer: 1

2810 08/24/23 10:19:26 RUN END DATA	CV-Sys T: 0 0 21.4
2809 08/24/23 10:19:26 RUN END DATA	CV-Sys B: 0 0 21.6
2808 08/24/23 10:19:26 RUN END DATA	CV-Sys O: 0 0 # 70
2807 08/24/23 10:19:26 RUN END DATA	CV-Sys 20:56h 10.58kh 505.26w
2806 08/24/23 10:19:26 CONTACT STOP	CV-Sys
2805 08/24/23 10:19:26 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2804 08/24/23 10:19:05 START UP DATA	CV-Sys Alarms: 0000000000000000
2803 08/24/23 10:19:05 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2802 08/24/23 10:19:05 START UP DATA	CV-Sys FID = CC:02.07.08
2801 08/24/23 10:19:05 START UP DATA	CV-Sys LVS= 47.9,2,52.5,28.7
2800 08/24/23 10:19:05 START UP DATA	CV-Sys 52.1v,1452p,2.74v,2.62v
2799 08/24/23 10:19:05 CONTACT START	CV-Sys Contact SN: PPS23249002
2798 08/24/23 10:19:04 ALARM OFF	CV-Sys MJ,Rt H2 SensorLeak
2797 08/24/23 10:18:55 RUN END DATA	CV-Sys Days To Next Exer: 1
2796 08/24/23 10:18:55 RUN END DATA	CV-Sys T: 0 0 21.4
2795 08/24/23 10:18:55 RUN END DATA	CV-Sys B: 0 0 21.6
2794 08/24/23 10:18:55 RUN END DATA	CV-Sys O: 0 0 # 69
2793 08/24/23 10:18:55 RUN END DATA	CV-Sys 20:56h 10.58kh 505.26w
2792 08/24/23 10:18:55 CONTACT STOP	CV-Sys
2791 08/24/23 10:18:55 WARNING	CV-Sys MJ,Rt H2 SensorLeak
2790 08/24/23 10:18:55 SYSTEM RUN ENDED	CV-Sys
2789 08/24/23 10:18:55 ALARM ON	CV-Sys MJ,Rt H2 SensorLeak
2788 08/24/23 10:18:49 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2787 08/24/23 10:18:49 START UP DATA	CV-Sys Alarms: 0000000000000000
2786 08/24/23 10:18:49 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2785 08/24/23 10:18:49 START UP DATA	CV-Sys FID = CC:02.07.08
2784 08/24/23 10:18:49 START UP DATA	CV-Sys LVS= 47.9,2,52.5,28.9
2783 08/24/23 10:18:49 START UP DATA	CV-Sys 51.6v,1452p,2.94v,2.93v
2782 08/24/23 10:18:49 CONTACT START	CV-Sys Contact SN: PPS23249002
2781 08/24/23 10:15:52 ALARM OFF	CV-Sys MJ,Rt H2 SensorLeak
2780 08/24/23 10:15:48 USER LOGGED IN	WEB ADMIN1
2779 08/24/23 10:15:40 ALARM OFF	CV-Sys MJ,Lt H2 SensorLeak
2778 08/24/23 10:15:37 USER LOGGED OUT	WEB ADMIN1
2777 08/24/23 10:15:04 ALARM ON	CV-Sys MJ,Lt H2 SensorLeak
2776 08/24/23 10:15:01 ALARM ON	CV-Sys MJ,Rt H2 SensorLeak
2775 08/24/23 10:14:48 RUN END DATA	CV-Sys Days To Next Exer: 1
2774 08/24/23 10:14:48 RUN END DATA	CV-Sys T: 10 16 21.4
2773 08/24/23 10:14:48 RUN END DATA	CV-Sys B: 14 18 21.6
2772 08/24/23 10:14:48 RUN END DATA	CV-Sys O: 97 0 # 68
2771 08/24/23 10:14:48 RUN END DATA	CV-Sys 20:56h 10.58kh 505.26w
2770 08/24/23 10:14:48 CONTACT STOP	CV-Sys
2769 08/24/23 10:14:48 SYSTEM OUTPUT	CV-Sys 20.8v 28.2c 25.0c
2768 08/24/23 10:14:47 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
2767 08/24/23 10:14:47 SYSTEM OUTPUT	CV-Sys Max O/T/B: 0w 15w 18w
2766 08/24/23 10:14:47 SYSTEM OUTPUT	CV-Sys Bot: 21.7v 0.5a 14w
2765 08/24/23 10:14:47 SYSTEM OUTPUT	CV-Sys Top: 21.7v 0.3a 7w
2764 08/24/23 10:14:47 SYSTEM OUTPUT	CV-Sys out: 52.9v 0.0a 0.0w
2763 08/24/23 10:14:36 SYSTEM RUNNING	CV-Sys
2762 08/24/23 10:14:33 START UP DATA	CV-Sys Top/Bot OCV: 22.60v 22.89v
2761 08/24/23 10:14:27 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2760 08/24/23 10:14:27 START UP DATA	CV-Sys Alarms: 0000000000000000
2759 08/24/23 10:14:27 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2758 08/24/23 10:14:27 START UP DATA	CV-Sys FID = CC:02.07.08

2757 08/24/23 10:14:27 START UP DATA	CV-Sys LVS= 47.9,2,52.5,28.7
2756 08/24/23 10:14:27 START UP DATA	CV-Sys 52.0v,1454p,3.02v,3.02v
2755 08/24/23 10:14:27 CONTACT START	CV-Sys Contact SN: PPS23249002
2754 08/24/23 10:12:35 USER LOGGED IN	WEB ADMIN1
2753 08/24/23 10:12:12 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.4a 0w
2752 08/24/23 10:12:12 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.2a 0w
2751 08/24/23 10:12:11 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
2750 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
2749 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48
2748 08/24/23 10:12:10 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48
2747 08/24/23 10:11:57 SYSTEM DE-ENERGIZED	CC-Sys
2746 08/24/23 10:11:55 START UP DATA	CV-Sys Alarms: 0000000000000000
2745 08/24/23 10:11:55 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2744 08/24/23 10:11:55 START UP DATA	CV-Sys FID = CC:02.07.08
2743 08/24/23 10:11:55 START UP DATA	CV-Sys LVS= 47.9,2,52.5,28.5
2742 08/24/23 10:11:55 START UP DATA	CV-Sys 53.5v,1450p,2.37v,2.24v
2741 08/24/23 10:11:55 CONTACT START	CV-Sys Contact SN: PPS23249002
2740 08/24/23 10:11:50 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.5a 0w
2739 08/24/23 10:11:50 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.3a 0w
2738 08/24/23 10:11:49 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
2737 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
2736 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48
2735 08/24/23 10:11:49 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48
2734 08/24/23 10:11:38 SYSTEM DE-ENERGIZED	CC-Sys
2733 08/24/23 09:46:32 USER LOGGED IN	WEB ADMIN1
2732 08/24/23 09:46:21 USER LOGGED OUT	WEB ADMIN1
2731 08/24/23 09:46:19 USER LOGGED OUT	WEB ADMIN1
2730 08/24/23 08:32:19 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.5a 0w
2729 08/24/23 08:32:19 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.3a 0w
2728 08/24/23 08:17:19 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.5a 0w
2727 08/24/23 08:17:19 SYSTEM OUTPUT	CV-Sys Top: 0.3v 0.3a 0w
2726 08/24/23 08:02:19 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.5a 0w
2725 08/24/23 08:02:19 SYSTEM OUTPUT	CV-Sys Top: 1.6v 0.5a 0w
2724 08/24/23 07:47:19 SYSTEM OUTPUT	CV-Sys Bot: 4.2v 0.5a 2w
2723 08/24/23 07:47:19 SYSTEM OUTPUT	CV-Sys Top: 22.8v 0.3a 5w
2722 08/24/23 07:33:02 ALARM OFF	CV-Sys Mj,Rt H2 SensorLeak
2721 08/24/23 07:32:57 ALARM OFF	CV-Sys Mj,Lt H2 SensorLeak
2720 08/24/23 07:32:36 ALARM ON	CV-Sys Mj,Lt H2 SensorLeak
2719 08/24/23 07:32:30 ALARM ON	CV-Sys Mj,Rt H2 SensorLeak
2718 08/24/23 07:32:29 ALARM OFF	CV-Sys Mj,Rt H2 SensorLeak
2717 08/24/23 07:32:24 ALARM ON	CV-Sys Mj,Rt H2 SensorLeak
2716 08/24/23 07:32:19 RUN END DATA	CV-Sys Days To Next Exer: 28
2715 08/24/23 07:32:19 RUN END DATA	CV-Sys T: 88 141 19.3
2714 08/24/23 07:32:19 RUN END DATA	CV-Sys B: 101 158 19.3
2713 08/24/23 07:32:19 RUN END DATA	CV-Sys O: 89 215 # 67
2712 08/24/23 07:32:19 RUN END DATA	CV-Sys 20:56h 10.58kh 505.34w
2711 08/24/23 07:32:19 CONTACT STOP	CV-Sys
2710 08/24/23 07:32:19 SYSTEM OUTPUT	CV-Sys 20.8v 29.7c 28.3c
2709 08/24/23 07:32:18 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
2708 08/24/23 07:32:18 SYSTEM OUTPUT	CV-Sys Max O/T/B: 216w 140w 157w
2707 08/24/23 07:32:18 SYSTEM OUTPUT	CV-Sys Bot: 20.8v 3.4a 67w
2706 08/24/23 07:32:18 SYSTEM OUTPUT	CV-Sys Top: 20.7v 3.0a 60w
2705 08/24/23 07:32:18 SYSTEM OUTPUT	CV-Sys out: 52.7v 0.5a 25.9w

2704 08/24/23 07:26:39 SYSTEM OUTPUT	CV-Sys 20.4v 28.4c 25.0c R
2703 08/24/23 07:26:39 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
2702 08/24/23 07:26:39 SYSTEM OUTPUT	CV-Sys Max O/T/B: 213w 140w 158w
2701 08/24/23 07:26:39 SYSTEM OUTPUT	CV-Sys Bot: 20.4v 4.5a 92w R
2700 08/24/23 07:26:39 SYSTEM OUTPUT	CV-Sys Top: 20.4v 3.7a 75w R
2699 08/24/23 07:26:38 SYSTEM OUTPUT	CV-Sys out: 52.7v 1.2a 63.7w R
2698 08/24/23 07:14:43 SYSTEM OUTPUT	CV-Sys 20.5v 28.9c 25.0c R
2697 08/24/23 07:14:43 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
2696 08/24/23 07:14:43 SYSTEM OUTPUT	CV-Sys Max O/T/B: 209w 141w 149w
2695 08/24/23 07:14:43 SYSTEM OUTPUT	CV-Sys Bot: 20.5v 4.6a 92w R
2694 08/24/23 07:14:43 SYSTEM OUTPUT	CV-Sys Top: 20.5v 3.8a 70w R
2693 08/24/23 07:14:42 SYSTEM OUTPUT	CV-Sys out: 52.7v 1.3a 71.0w R
2692 08/24/23 07:02:49 SYSTEM OUTPUT	CV-Sys 20.5v 29.6c 25.0c R
2691 08/24/23 07:02:49 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
2690 08/24/23 07:02:49 SYSTEM OUTPUT	CV-Sys Max O/T/B: 337w 192w 186w
2689 08/24/23 07:02:49 SYSTEM OUTPUT	CV-Sys Bot: 20.6v 3.5a 73w R
2688 08/24/23 07:02:48 SYSTEM OUTPUT	CV-Sys Top: 20.6v 3.6a 74w R
2687 08/24/23 07:02:48 SYSTEM OUTPUT	CV-Sys out: 52.7v 1.2a 64.6w R
2686 08/24/23 06:53:18 EXERCISE DATE CHG	WEB Reset due Exer Mode chg
2685 08/24/23 06:53:18 EXERCISE MODE CHG	WEB [AutoSchedule]
2684 08/24/23 06:52:37 SYSTEM RUNNING	CV-Sys
2683 08/24/23 06:52:34 START UP DATA	CV-Sys Top/Bot OCV: 23.26v 23.09v
2682 08/24/23 06:52:27 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2681 08/24/23 06:52:27 START UP DATA	CV-Sys Alarms: 0000000000000000
2680 08/24/23 06:52:27 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2679 08/24/23 06:52:27 START UP DATA	CV-Sys FID = CC:02.07.08
2678 08/24/23 06:52:27 START UP DATA	CV-Sys LVS= 47.9,2,52.5,27.7
2677 08/24/23 06:52:27 START UP DATA	CV-Sys 53.9v,1468p,3.01v,3.03v
2676 08/24/23 06:52:27 CONTACT START	CV-Sys Contact SN: PPS23249002
2675 08/24/23 06:52:13 USER LOGGED IN	WEB ADMIN1
2674 08/24/23 03:00:18 ALARM OFF	CV-Sys Mj,Rt H2 SensorLeak
2673 08/24/23 03:00:10 RUN END DATA	CV-Sys Days To Next Exer: 1
2672 08/24/23 03:00:10 RUN END DATA	CV-Sys T: 0 0 0.0
2671 08/24/23 03:00:10 RUN END DATA	CV-Sys B: 0 0 0.0
2670 08/24/23 03:00:10 RUN END DATA	CV-Sys O: 0 0 # 66
2669 08/24/23 03:00:10 RUN END DATA	CV-Sys 20:20h 10.53kh 518.16w
2668 08/24/23 03:00:09 SYSTEM OUTPUT	CV-Sys 21.1v 27.5c 25.0c
2667 08/24/23 03:00:09 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
2666 08/24/23 03:00:09 SYSTEM OUTPUT	CV-Sys Max O/T/B: 0w 12w 14w
2665 08/24/23 03:00:09 SYSTEM OUTPUT	CV-Sys Bot: 20.8v 0.5a 11w
2664 08/24/23 03:00:09 SYSTEM OUTPUT	CV-Sys Top: 20.3v 1.8a 8w
2663 08/24/23 03:00:09 SYSTEM OUTPUT	CV-Sys out: 53.9v 0.0a 0.0w
2662 08/24/23 03:00:09 SYSTEM RUN ENDED	CV-Sys
2661 08/24/23 03:00:09 ALARM ON	CV-Sys Mj,Rt H2 SensorLeak
2660 08/24/23 03:00:09 SYSTEM EXERCISING	CV-Sys
2659 08/24/23 03:00:06 START UP DATA	CV-Sys Top/Bot OCV: 23.14v 22.79v
2658 08/24/23 03:00:00 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2657 08/24/23 03:00:00 START UP DATA	CV-Sys Alarms: 0000000000000000
2656 08/24/23 03:00:00 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2655 08/24/23 03:00:00 START UP DATA	CV-Sys FID = CC:02.07.08
2654 08/24/23 03:00:00 START UP DATA	CV-Sys LVS= 47.9,2,52.5,27.5
2653 08/24/23 03:00:00 START UP DATA	CV-Sys 54.5v,1459p,3.01v,3.03v
2652 08/24/23 03:00:00 AUTO EXERCISE START	CV-Sys Exercise SN: PPS23249002

2651 08/24/23 00:00:02 SYSTEM OUTPUT CV-Sys Bot: 0.1v 0.3a 0w
 2650 08/24/23 00:00:02 SYSTEM OUTPUT CV-Sys Top: 0.2v 0.3a 0w
 2649 08/24/23 00:00:01 DAILY TEMPS CC-Sys CC: High = 33 , Low = 29
 2648 08/23/23 21:53:46 LOW PRESSURE ALERT OFF CC-Sys
 2647 08/23/23 21:52:37 LOW PRESSURE ALERT ON CC-Sys
 2646 08/23/23 21:49:48 LOW PRESSURE ALERT OFF CC-Sys
 2645 08/23/23 21:49:29 ALARM OFF CC-Sys Mn,H2 Low Pressure
 2644 08/23/23 21:48:05 ALARM ON CC-Sys Mn,H2 Low Pressure
 2643 08/23/23 21:47:56 LOW PRESSURE ALERT ON CC-Sys
 2642 08/23/23 21:28:42 LOW PRESSURE ALERT OFF CC-Sys
 2641 08/23/23 20:56:34 ALARM OFF CC-Sys Mn,H2 Low Pressure
 2640 08/23/23 20:56:04 ALARM ON CC-Sys Mn,H2 Low Pressure
 2639 08/23/23 20:42:24 ALARM OFF CC-Sys Mn,H2 Low Pressure
 2638 08/23/23 20:41:00 ALARM ON CC-Sys Mn,H2 Low Pressure
 2637 08/23/23 20:40:23 LOW PRESSURE ALERT ON CC-Sys
 2636 08/23/23 12:20:57 RUN END DATA CV-Sys Days To Next Exer: 1
 2635 08/23/23 12:20:57 RUN END DATA CV-Sys T: 0 0 0.0
 2634 08/23/23 12:20:57 RUN END DATA CV-Sys B: 0 0 0.0
 2633 08/23/23 12:20:57 RUN END DATA CV-Sys O: 0 0 # 65
 2632 08/23/23 12:20:57 RUN END DATA CV-Sys 20:20h 10.53kh 518.16w
 2631 08/23/23 12:20:57 CONTACT STOP CV-Sys
 2630 08/23/23 12:20:57 SYSTEM START ATTEMPT CV-Sys Bot/Top Modules
 2629 08/23/23 12:20:37 START UP DATA CV-Sys Alarms: 0000000000000000
 2628 08/23/23 12:20:37 START UP DATA CV-Sys FID = E11CV:02.07.08.TM
 2627 08/23/23 12:20:37 START UP DATA CV-Sys FID = CC:02.07.08
 2626 08/23/23 12:20:37 START UP DATA CV-Sys LVS= 47.9,2,52.5,31.3
 2625 08/23/23 12:20:37 START UP DATA CV-Sys 52.8v,1469p,1.98v,1.79v
 2624 08/23/23 12:20:37 CONTACT START CV-Sys Contact SN: PPS23249002
 2623 08/23/23 12:20:32 SYSTEM OUTPUT CV-Sys Bot: 0.1v 0.5a 0w
 2622 08/23/23 12:20:32 SYSTEM OUTPUT CV-Sys Top: 0.2v 0.4a 0w
 2621 08/23/23 12:20:31 EXERCISE DATE CHG CV-Sys Date was bad, Tomorrow Set
 2620 06/14/23 13:17:42 EXERCISE DATE CHG CV-Sys Date was bad, Tomorrow Set
 2619 06/14/23 13:17:42 CONV SYSTEM ENERGIZED CV-Sys Reset Status Reg: 0x48
 2618 08/23/23 12:20:31 SYSTEM ENERGIZED CC-Sys Reset Status Reg: 0x48
 2617 08/23/23 10:36:12 SYSTEM DE-ENERGIZED CC-Sys
 2616 08/23/23 10:34:15 RUN END DATA CV-Sys Days To Next Exer: 1
 2615 08/23/23 10:34:15 RUN END DATA CV-Sys T: 690 1013 16.9
 2614 08/23/23 10:34:15 RUN END DATA CV-Sys B: 703 1015 17.2
 2613 08/23/23 10:34:15 RUN END DATA CV-Sys O: 1230 1721 # 64
 2612 08/23/23 10:34:15 RUN END DATA CV-Sys 20:20h 10.53kh 518.16w
 2611 08/23/23 10:34:15 CONTACT STOP CV-Sys
 2610 08/23/23 10:34:15 SYSTEM OUTPUT CV-Sys 20.3v 56.9c 43.6c
 2609 08/23/23 10:34:15 SYSTEM OUTPUT CV-Sys Min O/T/B: 280w 277w 268w
 2608 08/23/23 10:34:15 SYSTEM OUTPUT CV-Sys Max O/T/B: 1648w 961w 974w
 2607 08/23/23 10:34:15 SYSTEM OUTPUT CV-Sys Bot: 20.3v 8.9a 268w
 2606 08/23/23 10:34:15 SYSTEM OUTPUT CV-Sys Top: 20.2v 9.1a 277w
 2605 08/23/23 10:34:15 SYSTEM OUTPUT CV-Sys out: 52.6v 6.0a 316.3w
 2604 08/23/23 10:30:20 USER LOGGED IN WEB ADMIN1
 2603 08/23/23 10:30:11 USER LOGGED OUT WEB ADMIN1
 2602 08/23/23 10:30:10 USER LOGGED OUT WEB ADMIN1
 2601 08/23/23 10:29:21 SYSTEM OUTPUT CV-Sys 17.7v 57.1c 56.9c
 2600 08/23/23 10:29:21 SYSTEM OUTPUT CV-Sys Min O/T/B: 837w 444w 451w
 2599 08/23/23 10:29:21 SYSTEM OUTPUT CV-Sys Max O/T/B: 1647w 964w 979w

2598 08/23/23 10:29:21 SYSTEM OUTPUT	CV-Sys Bot: 17.7v 37.3a 661w
2597 08/23/23 10:29:21 SYSTEM OUTPUT	CV-Sys Top: 17.7v 37.1a 657w
2596 08/23/23 10:29:21 SYSTEM OUTPUT	CV-Sys out: 52.2v 24.1a 1259.8w
2595 08/23/23 10:14:21 SYSTEM OUTPUT	CV-Sys 17.4v 56.5c 54.1c
2594 08/23/23 10:14:21 SYSTEM OUTPUT	CV-Sys Min O/T/B: 841w 452w 452w
2593 08/23/23 10:14:21 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1642w 975w 990w
2592 08/23/23 10:14:21 SYSTEM OUTPUT	CV-Sys Bot: 17.4v 29.1a 505w
2591 08/23/23 10:14:21 SYSTEM OUTPUT	CV-Sys Top: 17.4v 27.8a 482w
2590 08/23/23 10:14:21 SYSTEM OUTPUT	CV-Sys out: 52.6v 17.3a 909.4w
2589 08/23/23 09:59:21 SYSTEM OUTPUT	CV-Sys 17.9v 56.2c 54.1c
2588 08/23/23 09:59:21 SYSTEM OUTPUT	CV-Sys Min O/T/B: 845w 448w 448w
2587 08/23/23 09:59:21 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1647w 971w 983w
2586 08/23/23 09:59:21 SYSTEM OUTPUT	CV-Sys Bot: 17.9v 29.2a 521w
2585 08/23/23 09:59:21 SYSTEM OUTPUT	CV-Sys Top: 17.9v 27.9a 499w
2584 08/23/23 09:59:21 SYSTEM OUTPUT	CV-Sys out: 52.7v 16.5a 868.7w
2583 08/23/23 09:44:21 SYSTEM OUTPUT	CV-Sys 17.2v 56.1c 58.2c
2582 08/23/23 09:44:21 SYSTEM OUTPUT	CV-Sys Min O/T/B: 844w 447w 452w
2581 08/23/23 09:44:21 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1645w 962w 1000w
2580 08/23/23 09:44:21 SYSTEM OUTPUT	CV-Sys Bot: 17.2v 41.8a 720w
2579 08/23/23 09:44:21 SYSTEM OUTPUT	CV-Sys Top: 17.2v 41.6a 717w
2578 08/23/23 09:44:21 SYSTEM OUTPUT	CV-Sys out: 52.7v 22.4a 1179.5w
2577 08/23/23 09:29:21 SYSTEM OUTPUT	CV-Sys 16.9v 56.2c 61.8c
2576 08/23/23 09:29:21 SYSTEM OUTPUT	CV-Sys Min O/T/B: 845w 449w 454w
2575 08/23/23 09:29:21 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1649w 976w 987w
2574 08/23/23 09:29:21 SYSTEM OUTPUT	CV-Sys Bot: 16.9v 50.7a 857w
2573 08/23/23 09:29:21 SYSTEM OUTPUT	CV-Sys Top: 16.9v 51.2a 865w
2572 08/23/23 09:29:21 SYSTEM OUTPUT	CV-Sys out: 52.5v 27.8a 1458.0w
2571 08/23/23 09:14:21 SYSTEM OUTPUT	CV-Sys 17.3v 56.1c 62.7c
2570 08/23/23 09:14:21 SYSTEM OUTPUT	CV-Sys Min O/T/B: 844w 453w 455w
2569 08/23/23 09:14:21 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1651w 971w 990w
2568 08/23/23 09:14:21 SYSTEM OUTPUT	CV-Sys Bot: 17.4v 53.6a 929w
2567 08/23/23 09:14:21 SYSTEM OUTPUT	CV-Sys Top: 17.3v 51.4a 891w
2566 08/23/23 09:14:21 SYSTEM OUTPUT	CV-Sys out: 52.2v 31.0a 1614.8w
2565 08/23/23 08:59:21 SYSTEM OUTPUT	CV-Sys 16.7v 56.3c 58.4c
2564 08/23/23 08:59:21 SYSTEM OUTPUT	CV-Sys Min O/T/B: 758w 417w 434w
2563 08/23/23 08:59:21 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1720w 1012w 1014w
2562 08/23/23 08:59:21 SYSTEM OUTPUT	CV-Sys Bot: 16.7v 43.2a 722w
2561 08/23/23 08:59:21 SYSTEM OUTPUT	CV-Sys Top: 16.7v 41.5a 694w
2560 08/23/23 08:59:21 SYSTEM OUTPUT	CV-Sys out: 52.1v 26.1a 1362.9w
2559 08/23/23 08:44:21 SYSTEM OUTPUT	CV-Sys 17.7v 54.0c 59.7c
2558 08/23/23 08:44:21 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
2557 08/23/23 08:44:21 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1576w 891w 908w
2556 08/23/23 08:44:21 SYSTEM OUTPUT	CV-Sys Bot: 17.7v 46.1a 817w
2555 08/23/23 08:44:21 SYSTEM OUTPUT	CV-Sys Top: 17.7v 45.9a 812w
2554 08/23/23 08:44:21 SYSTEM OUTPUT	CV-Sys out: 50.3v 29.9a 1503.1w
2553 08/23/23 08:29:21 SYSTEM RUNNING	CV-Sys
2552 08/23/23 08:29:18 START UP DATA	CV-Sys Top/Bot OCV: 22.04v 22.03v
2551 08/23/23 08:29:13 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2550 08/23/23 08:28:52 START UP DATA	CV-Sys Alarms: 0000000000000000
2549 08/23/23 08:28:52 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2548 08/23/23 08:28:52 START UP DATA	CV-Sys FID = CC:02.07.08
2547 08/23/23 08:28:52 START UP DATA	CV-Sys LVS= 47.9,2,52.5,35.5
2546 08/23/23 08:28:52 START UP DATA	CV-Sys 48.8v,1604p,2.60v,2.62v

2545 08/23/23 08:28:52 CONTACT START	CV-Sys Contact SN: PPS23249002
2544 08/23/23 08:28:51 ALARM OFF	CV-Sys MJ,Rt H2 SensorLeak
2543 08/23/23 08:28:43 RUN END DATA	CV-Sys Days To Next Exer: 1
2542 08/23/23 08:28:43 RUN END DATA	CV-Sys T: 15 14 21.4
2541 08/23/23 08:28:43 RUN END DATA	CV-Sys B: 17 18 21.5
2540 08/23/23 08:28:43 RUN END DATA	CV-Sys O: 165 165 # 63
2539 08/23/23 08:28:43 RUN END DATA	CV-Sys 18:15h 7.97kh 436.95w
2538 08/23/23 08:28:43 SYSTEM OUTPUT	CV-Sys 21.7v 35.9c 25.0c
2537 08/23/23 08:28:43 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
2536 08/23/23 08:28:43 SYSTEM OUTPUT	CV-Sys Max O/T/B: 170w 14w 17w
2535 08/23/23 08:28:42 SYSTEM OUTPUT	CV-Sys Bot: 21.5v 0.8a 9w
2534 08/23/23 08:28:42 SYSTEM OUTPUT	CV-Sys Top: 21.0v 1.2a 7w
2533 08/23/23 08:28:42 SYSTEM OUTPUT	CV-Sys out: 49.5v 3.3a 161.9w
2532 08/23/23 08:28:42 SYSTEM RUN ENDED	CV-Sys
2531 08/23/23 08:28:42 ALARM ON	CV-Sys MJ,Rt H2 SensorLeak
2530 08/23/23 08:28:42 SYSTEM RUNNING	CV-Sys
2529 08/23/23 08:28:39 START UP DATA	CV-Sys Top/Bot OCV: 21.91v 21.48v
2528 08/23/23 08:28:33 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2527 08/23/23 08:28:33 START UP DATA	CV-Sys Alarms: 0000000000000000
2526 08/23/23 08:28:33 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2525 08/23/23 08:28:33 START UP DATA	CV-Sys FID = CC:02.07.08
2524 08/23/23 08:28:33 START UP DATA	CV-Sys LVS= 47.9,2,52.5,36.0
2523 08/23/23 08:28:33 START UP DATA	CV-Sys 51.9v,1604p,2.90v,2.92v
2522 08/23/23 08:28:33 CONTACT START	CV-Sys Contact SN: PPS23249002
2521 08/23/23 08:27:55 RUN END DATA	CV-Sys Days To Next Exer: 1
2520 08/23/23 08:27:55 RUN END DATA	CV-Sys T: 0 0 0.0
2519 08/23/23 08:27:55 RUN END DATA	CV-Sys B: 0 0 0.0
2518 08/23/23 08:27:55 RUN END DATA	CV-Sys O: 0 0 # 62
2517 08/23/23 08:27:55 RUN END DATA	CV-Sys 18:15h 7.97kh 436.96w
2516 08/23/23 08:27:55 CONTACT STOP	CV-Sys
2515 08/23/23 08:27:55 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2514 08/23/23 08:27:45 USER LOGGED IN	WEB ADMIN1
2513 08/23/23 08:27:34 START UP DATA	CV-Sys Alarms: 0000000000000000
2512 08/23/23 08:27:34 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2511 08/23/23 08:27:34 START UP DATA	CV-Sys FID = CC:02.07.08
2510 08/23/23 08:27:34 START UP DATA	CV-Sys LVS= 47.9,2,52.5,35.6
2509 08/23/23 08:27:34 START UP DATA	CV-Sys 48.1v,1600p,2.10v,2.00v
2508 08/23/23 08:27:34 CONTACT START	CV-Sys Contact SN: PPS23249002
2507 08/23/23 08:27:30 SYSTEM OUTPUT	CV-Sys Bot: 22.2v 0.4a 0w
2506 08/23/23 08:27:30 SYSTEM OUTPUT	CV-Sys Top: 22.2v 0.2a 0w
2505 08/23/23 08:27:29 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
2504 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
2503 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48
2502 08/23/23 08:27:29 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48
2501 08/23/23 08:27:13 SYSTEM DE-ENERGIZED	CC-Sys
2500 08/23/23 08:26:57 START UP DATA	CV-Sys Alarms: 0000000000000000
2499 08/23/23 08:26:57 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2498 08/23/23 08:26:57 START UP DATA	CV-Sys FID = CC:02.07.08
2497 08/23/23 08:26:57 START UP DATA	CV-Sys LVS= 47.9,2,52.5,35.8
2496 08/23/23 08:26:57 START UP DATA	CV-Sys 49.7v,1605p,2.63v,2.61v
2495 08/23/23 08:26:57 CONTACT START	CV-Sys Contact SN: PPS23249002
2494 08/23/23 08:26:56 ALARM OFF	CV-Sys MJ,Rt H2 SensorLeak
2493 08/23/23 08:26:47 RUN END DATA	CV-Sys Days To Next Exer: 1

2492 08/23/23 08:26:47 RUN END DATA	CV-Sys T: 0 0 17.1
2491 08/23/23 08:26:47 RUN END DATA	CV-Sys B: 0 0 17.3
2490 08/23/23 08:26:47 RUN END DATA	CV-Sys O: 0 0 # 61
2489 08/23/23 08:26:47 RUN END DATA	CV-Sys 18:15h 7.97kh 436.96w
2488 08/23/23 08:26:47 SYSTEM OUTPUT	CV-Sys 21.7v 36.4c 25.0c
2487 08/23/23 08:26:47 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
2486 08/23/23 08:26:47 SYSTEM OUTPUT	CV-Sys Max O/T/B: 0w 8w 12w
2485 08/23/23 08:26:47 SYSTEM OUTPUT	CV-Sys Bot: 21.4v 0.8a 9w
2484 08/23/23 08:26:47 SYSTEM OUTPUT	CV-Sys Top: 20.9v 1.3a 5w
2483 08/23/23 08:26:47 SYSTEM OUTPUT	CV-Sys out: 51.3v 1.2a 62.9w
2482 08/23/23 08:26:47 SYSTEM RUN ENDED	CV-Sys
2481 08/23/23 08:26:47 ALARM ON	CV-Sys Mj,Rt H2 SensorLeak
2480 08/23/23 08:26:47 SYSTEM RUNNING	CV-Sys
2479 08/23/23 08:26:44 START UP DATA	CV-Sys Top/Bot OCV: 21.37v 21.59v
2478 08/23/23 08:26:38 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2477 08/23/23 08:26:38 START UP DATA	CV-Sys Alarms: 0000000000000000
2476 08/23/23 08:26:38 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2475 08/23/23 08:26:38 START UP DATA	CV-Sys FID = CC:02.07.08
2474 08/23/23 08:26:38 START UP DATA	CV-Sys LVS= 47.9,2,52.5,36.4
2473 08/23/23 08:26:38 START UP DATA	CV-Sys 53.1v,1604p,2.94v,2.96v
2472 08/23/23 08:26:38 CONTACT START	CV-Sys Contact SN: PPS23249002
2471 08/23/23 08:23:33 RUN END DATA	CV-Sys Days To Next Exer: 1
2470 08/23/23 08:23:33 RUN END DATA	CV-Sys T: 698 964 17.1
2469 08/23/23 08:23:33 RUN END DATA	CV-Sys B: 708 968 17.3
2468 08/23/23 08:23:33 RUN END DATA	CV-Sys O: 1274 1679 # 60
2467 08/23/23 08:23:33 RUN END DATA	CV-Sys 18:15h 7.97kh 436.96w
2466 08/23/23 08:23:33 CONTACT STOP	CV-Sys
2465 08/23/23 08:23:33 SYSTEM OUTPUT	CV-Sys 20.1v 50.5c 39.5c
2464 08/23/23 08:23:33 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
2463 08/23/23 08:23:33 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1709w 963w 967w
2462 08/23/23 08:23:33 SYSTEM OUTPUT	CV-Sys Bot: 20.1v 10.4a 212w
2461 08/23/23 08:23:33 SYSTEM OUTPUT	CV-Sys Top: 20.1v 9.6a 195w
2460 08/23/23 08:23:33 SYSTEM OUTPUT	CV-Sys out: 52.6v 6.1a 320.1w
2459 08/23/23 08:22:20 SYSTEM RUNNING	CV-Sys
2458 08/23/23 08:22:17 START UP DATA	CV-Sys Top/Bot OCV: 22.11v 22.32v
2457 08/23/23 08:22:11 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2456 08/23/23 08:22:11 START UP DATA	CV-Sys Alarms: 0000000000000000
2455 08/23/23 08:22:11 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2454 08/23/23 08:22:11 START UP DATA	CV-Sys FID = CC:02.07.08
2453 08/23/23 08:22:11 START UP DATA	CV-Sys LVS= 47.9,2,52.5,36.9
2452 08/23/23 08:22:11 START UP DATA	CV-Sys 52.3v,1608p,2.78v,2.75v
2451 08/23/23 08:22:11 CONTACT START	CV-Sys Contact SN: PPS23249002
2450 08/23/23 08:21:42 ALARM OFF	CV-Sys Mj,Lt H2 SensorLeak
2449 08/23/23 08:21:40 ALARM OFF	CV-Sys Mj,Rt H2 SensorLeak
2448 08/23/23 08:21:13 ALARM ON	CV-Sys Mj,Lt H2 SensorLeak
2447 08/23/23 08:21:13 ALARM ON	CV-Sys Mj,Rt H2 SensorLeak
2446 08/23/23 08:21:01 RUN END DATA	CV-Sys Days To Next Exer: 1
2445 08/23/23 08:21:01 RUN END DATA	CV-Sys T: 122 167 19.2
2444 08/23/23 08:21:01 RUN END DATA	CV-Sys B: 137 183 19.2
2443 08/23/23 08:21:01 RUN END DATA	CV-Sys O: 177 266 # 59
2442 08/23/23 08:21:01 RUN END DATA	CV-Sys 18:13h 7.95kh 436.08w
2441 08/23/23 08:21:01 CONTACT STOP	CV-Sys
2440 08/23/23 08:21:01 SYSTEM OUTPUT	CV-Sys 19.3v 36.2c 36.5c

2439 08/23/23 08:21:01 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
2438 08/23/23 08:21:01 SYSTEM OUTPUT	CV-Sys Max O/T/B: 266w 166w 182w
2437 08/23/23 08:21:01 SYSTEM OUTPUT	CV-Sys Bot: 19.3v 8.6a 162w
2436 08/23/23 08:21:01 SYSTEM OUTPUT	CV-Sys Top: 19.3v 7.7a 147w
2435 08/23/23 08:21:00 SYSTEM OUTPUT	CV-Sys out: 52.5v 4.3a 226.0w
2434 08/23/23 08:20:40 SYSTEM RUNNING	CV-Sys
2433 08/23/23 08:20:37 START UP DATA	CV-Sys Top/Bot OCV: 21.76v 22.08v
2432 08/23/23 08:20:32 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2431 08/23/23 08:20:20 START UP DATA	CV-Sys Alarms: 0000000000000000
2430 08/23/23 08:20:20 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2429 08/23/23 08:20:20 START UP DATA	CV-Sys FID = CC:02.07.08
2428 08/23/23 08:20:20 START UP DATA	CV-Sys LVS= 47.9,2,52.5,36.7
2427 08/23/23 08:20:20 START UP DATA	CV-Sys 52.7v,1610p,2.77v,2.76v
2426 08/23/23 08:20:20 CONTACT START	CV-Sys Contact SN: PPS23249002
2425 08/23/23 08:20:02 RUN END DATA	CV-Sys Days To Next Exer: 1
2424 08/23/23 08:20:02 RUN END DATA	CV-Sys T: 0 0 21.7
2423 08/23/23 08:20:02 RUN END DATA	CV-Sys B: 0 0 21.7
2422 08/23/23 08:20:02 RUN END DATA	CV-Sys O: 0 0 # 58
2421 08/23/23 08:20:02 RUN END DATA	CV-Sys 18:13h 7.95kh 436.16w
2420 08/23/23 08:20:02 CONTACT STOP	CV-Sys
2419 08/23/23 08:20:02 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2418 08/23/23 08:19:40 START UP DATA	CV-Sys Alarms: 0000000000000000
2417 08/23/23 08:19:40 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2416 08/23/23 08:19:40 START UP DATA	CV-Sys FID = CC:02.07.08
2415 08/23/23 08:19:40 START UP DATA	CV-Sys LVS= 47.9,2,52.5,36.3
2414 08/23/23 08:19:40 START UP DATA	CV-Sys 51.0v,1608p,2.70v,2.64v
2413 08/23/23 08:19:40 CONTACT START	CV-Sys Contact SN: PPS23249002
2412 08/23/23 08:19:40 SYSTEM RUN ENDED	CV-Sys
2411 08/23/23 08:19:39 RUN END DATA	CV-Sys Days To Next Exer: 1
2410 08/23/23 08:19:39 RUN END DATA	CV-Sys T: 0 0 21.7
2409 08/23/23 08:19:39 RUN END DATA	CV-Sys B: 0 0 21.7
2408 08/23/23 08:19:39 RUN END DATA	CV-Sys O: 0 0 # 57
2407 08/23/23 08:19:39 RUN END DATA	CV-Sys 18:13h 7.95kh 436.16w
2406 08/23/23 08:19:39 CONTACT STOP	CV-Sys
2405 08/23/23 08:19:39 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2404 08/23/23 08:19:18 START UP DATA	CV-Sys Alarms: 0000000000000000
2403 08/23/23 08:19:18 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2402 08/23/23 08:19:18 START UP DATA	CV-Sys FID = CC:02.07.08
2401 08/23/23 08:19:18 START UP DATA	CV-Sys LVS= 47.9,2,52.5,36.1
2400 08/23/23 08:19:18 START UP DATA	CV-Sys 49.3v,1609p,2.18v,2.12v
2399 08/23/23 08:19:18 CONTACT START	CV-Sys Contact SN: PPS23249002
2398 08/23/23 08:19:17 ALARM OFF	CV-Sys Mj,Rt H2 SensorLeak
2397 08/23/23 08:19:15 ALARM OFF	CV-Sys Mj,Lt H2 SensorLeak
2396 08/23/23 08:19:00 ALARM ON	CV-Sys Mj,Lt H2 SensorLeak
2395 08/23/23 08:19:00 ALARM ON	CV-Sys Mj,Rt H2 SensorLeak
2394 08/23/23 08:18:47 RUN END DATA	CV-Sys Days To Next Exer: 1
2393 08/23/23 08:18:47 RUN END DATA	CV-Sys T: 5 19 21.7
2392 08/23/23 08:18:47 RUN END DATA	CV-Sys B: 8 20 21.7
2391 08/23/23 08:18:47 RUN END DATA	CV-Sys O: 1 0 # 56
2390 08/23/23 08:18:47 RUN END DATA	CV-Sys 18:13h 7.95kh 436.16w
2389 08/23/23 08:18:47 CONTACT STOP	CV-Sys
2388 08/23/23 08:18:47 SYSTEM OUTPUT	CV-Sys 21.5v 36.3c 25.0c
2387 08/23/23 08:18:47 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w

2386 08/23/23 08:18:47 SYSTEM OUTPUT	CV-Sys Max O/T/B: 0w 18w 19w
2385 08/23/23 08:18:47 SYSTEM OUTPUT	CV-Sys Bot: 21.6v 0.8a 19w
2384 08/23/23 08:18:47 SYSTEM OUTPUT	CV-Sys Top: 21.6v 0.6a 18w
2383 08/23/23 08:18:47 SYSTEM OUTPUT	CV-Sys out: 52.9v 0.0a 0.0w
2382 08/23/23 08:18:26 SYSTEM RUNNING	CV-Sys
2381 08/23/23 08:18:23 START UP DATA	CV-Sys Top/Bot OCV: 22.21v 22.37v
2380 08/23/23 08:18:17 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2379 08/23/23 08:18:17 START UP DATA	CV-Sys Alarms: 0000000000000000
2378 08/23/23 08:18:17 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2377 08/23/23 08:18:17 START UP DATA	CV-Sys FID = CC:02.07.08
2376 08/23/23 08:18:17 START UP DATA	CV-Sys LVS= 47.9,2,52.5,38.6
2375 08/23/23 08:18:17 START UP DATA	CV-Sys 53.5v,1610p,2.91v,2.94v
2374 08/23/23 08:18:17 CONTACT START	CV-Sys Contact SN: PPS23249002
2373 08/23/23 08:16:45 RUN END DATA	CV-Sys Days To Next Exer: 1
2372 08/23/23 08:16:45 RUN END DATA	CV-Sys T: 683 965 17.5
2371 08/23/23 08:16:45 RUN END DATA	CV-Sys B: 693 967 17.1
2370 08/23/23 08:16:45 RUN END DATA	CV-Sys O: 1218 1619 # 55
2369 08/23/23 08:16:45 RUN END DATA	CV-Sys 18:13h 7.94kh 436.30w
2368 08/23/23 08:16:45 CONTACT STOP	CV-Sys
2367 08/23/23 08:16:45 SYSTEM OUTPUT	CV-Sys 20.3v 55.9c 36.8c
2366 08/23/23 08:16:45 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
2365 08/23/23 08:16:44 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1628w 965w 967w
2364 08/23/23 08:16:44 SYSTEM OUTPUT	CV-Sys Bot: 20.3v 8.6a 347w
2363 08/23/23 08:16:44 SYSTEM OUTPUT	CV-Sys Top: 20.3v 8.0a 339w
2362 08/23/23 08:16:44 SYSTEM OUTPUT	CV-Sys out: 52.0v 5.5a 285.9w
2361 08/23/23 08:02:06 SYSTEM RUNNING	CV-Sys
2360 08/23/23 08:02:03 START UP DATA	CV-Sys Top/Bot OCV: 23.09v 22.85v
2359 08/23/23 08:01:57 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2358 08/23/23 08:01:56 START UP DATA	CV-Sys Alarms: 0000000000000000
2357 08/23/23 08:01:56 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2356 08/23/23 08:01:56 START UP DATA	CV-Sys FID = CC:02.07.08
2355 08/23/23 08:01:56 START UP DATA	CV-Sys LVS= 47.9,2,52.5,23.7
2354 08/23/23 08:01:56 START UP DATA	CV-Sys 53.5v,1630p,2.75v,2.71v
2353 08/23/23 08:01:56 CONTACT START	CV-Sys Contact SN: PPS23249002
2352 08/23/23 08:01:15 USER LOGGED IN	WEB ADMIN1
2351 08/23/23 08:00:44 SYSTEM OUTPUT	CV-Sys Bot: 21.0v 0.8a 0w
2350 08/23/23 08:00:44 SYSTEM OUTPUT	CV-Sys Top: 21.8v 0.5a 0w
2349 08/23/23 08:00:43 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
2348 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
2347 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48
2346 08/23/23 08:00:43 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48
2345 08/23/23 07:59:55 SYSTEM DE-ENERGIZED	CC-Sys
2344 08/23/23 07:59:54 NOTIFICATION OFF	CV-Sys Nt,LowH2 Detect, Lt 2.46
2343 08/23/23 07:59:48 NOTIFICATION ON	CV-Sys Nt,LowH2 Detect, Rt 2.35
2342 08/23/23 07:59:41 NOTIFICATION ON	CV-Sys Nt,LowH2 Detect, Lt 2.38
2341 08/23/23 07:59:18 ALARM OFF	CV-Sys Mj,Rt H2 SensorLeak
2340 08/23/23 07:59:11 ALARM OFF	CV-Sys Mj,Lt H2 SensorLeak
2339 08/23/23 07:59:00 RUN END DATA	CV-Sys Days To Next Exer: 1
2338 08/23/23 07:59:00 RUN END DATA	CV-Sys T: 0 0 0.0
2337 08/23/23 07:59:00 RUN END DATA	CV-Sys B: 0 0 0.0
2336 08/23/23 07:59:00 RUN END DATA	CV-Sys O: 0 0 # 54
2335 08/23/23 07:59:00 RUN END DATA	CV-Sys 17:58h 7.65kh 425.65w
2334 08/23/23 07:59:00 CONTACT STOP	CV-Sys

2333 08/23/23 07:59:00 WARNING CV-Sys MJ,Rt H2 SensorLeak
 2332 08/23/23 07:59:00 SYSTEM RUN ENDED CV-Sys
 2331 08/23/23 07:59:00 ALARM ON CV-Sys MJ,Rt H2 SensorLeak
 2330 08/23/23 07:59:00 ALARM ON CV-Sys MJ,Lt H2 SensorLeak
 2329 08/23/23 07:59:00 SYSTEM START ATTEMPT CV-Sys Bot/Top Modules
 2328 08/23/23 07:58:51 USER LOGGED IN WEB ADMIN1
 2327 08/23/23 07:58:40 START UP DATA CV-Sys Alarms: 0000000000000000
 2326 08/23/23 07:58:40 START UP DATA CV-Sys FID = E11CV:02.07.08.TM
 2325 08/23/23 07:58:40 START UP DATA CV-Sys FID = CC:02.07.08
 2324 08/23/23 07:58:40 START UP DATA CV-Sys LVS= 47.9,2,52.5,23.0
 2323 08/23/23 07:58:40 START UP DATA CV-Sys 48.6v,1626p,1.36v,1.28v
 2322 08/23/23 07:58:40 CONTACT START CV-Sys Contact SN: PPS23249002
 2321 08/23/23 07:58:35 SYSTEM OUTPUT CV-Sys Bot: 21.8v 0.6a 0w
 2320 08/23/23 07:58:35 SYSTEM OUTPUT CV-Sys Top: 21.9v 0.2a 0w
 2319 08/23/23 07:58:34 EXERCISE DATE CHG CV-Sys Date was bad, Tomorrow Set
 2318 06/14/23 13:17:42 EXERCISE DATE CHG CV-Sys Date was bad, Tomorrow Set
 2317 06/14/23 13:17:42 CONV SYSTEM ENERGIZED CV-Sys Reset Status Reg: 0x48
 2316 08/23/23 07:58:33 SYSTEM ENERGIZED CC-Sys Reset Status Reg: 0x48
 2315 08/23/23 07:58:26 SYSTEM DE-ENERGIZED CC-Sys
 2314 08/23/23 07:57:37 ALARM ON CV-Sys MJ,Rt H2 SensorLeak
 2313 08/23/23 07:57:35 ALARM ON CV-Sys MJ,Lt H2 SensorLeak
 2312 08/23/23 07:57:31 USER LOGGED IN WEB ADMIN1
 2311 08/23/23 07:57:25 RUN END DATA CV-Sys Days To Next Exer: 1
 2310 08/23/23 07:57:25 RUN END DATA CV-Sys T: 10 17 22.0
 2309 08/23/23 07:57:25 RUN END DATA CV-Sys B: 16 22 22.0
 2308 08/23/23 07:57:25 RUN END DATA CV-Sys O: 550 0 # 53
 2307 08/23/23 07:57:25 RUN END DATA CV-Sys 17:58h 7.65kh 425.65w
 2306 08/23/23 07:57:25 CONTACT STOP CV-Sys
 2305 08/23/23 07:57:25 SYSTEM OUTPUT CV-Sys 22.0v 22.4c 25.0c
 2304 08/23/23 07:57:25 SYSTEM OUTPUT CV-Sys Min O/T/B: 0w 0w 0w
 2303 08/23/23 07:57:25 SYSTEM OUTPUT CV-Sys Max O/T/B: 0w 17w 21w
 2302 08/23/23 07:57:25 SYSTEM OUTPUT CV-Sys Bot: 22.0v 0.4a 21w
 2301 08/23/23 07:57:25 SYSTEM OUTPUT CV-Sys Top: 22.0v 0.5a 17w
 2300 08/23/23 07:57:25 SYSTEM OUTPUT CV-Sys out: 54.1v 0.0a 0.0w
 2299 08/23/23 07:57:21 SYSTEM RUNNING CV-Sys
 2298 08/23/23 07:57:18 START UP DATA CV-Sys Top/Bot OCV: 23.52v 23.19v
 2297 08/23/23 07:57:12 SYSTEM START ATTEMPT CV-Sys Bot/Top Modules
 2296 08/23/23 07:56:55 START UP DATA CV-Sys Alarms: 0000000000000000
 2295 08/23/23 07:56:55 START UP DATA CV-Sys FID = E11CV:02.07.08.TM
 2294 08/23/23 07:56:55 START UP DATA CV-Sys FID = CC:02.07.08
 2293 08/23/23 07:56:55 START UP DATA CV-Sys LVS= 47.9,2,52.5,22.5
 2292 08/23/23 07:56:55 START UP DATA CV-Sys 51.7v,1624p,2.45v,2.39v
 2291 08/23/23 07:56:55 CONTACT START CV-Sys Contact SN: PPS23249002
 2290 08/23/23 07:56:47 SYSTEM OUTPUT CV-Sys Bot: 0.2v 1.4a 0w
 2289 08/23/23 07:56:47 SYSTEM OUTPUT CV-Sys Top: 0.2v 1.2a 0w
 2288 08/23/23 07:56:46 EXERCISE DATE CHG CV-Sys Date was bad, Tomorrow Set
 2287 06/14/23 13:17:42 EXERCISE DATE CHG CV-Sys Date was bad, Tomorrow Set
 2286 06/14/23 13:17:42 CONV SYSTEM ENERGIZED CV-Sys Reset Status Reg: 0x48
 2285 08/23/23 07:56:46 SYSTEM ENERGIZED CC-Sys Reset Status Reg: 0x48
 2284 08/22/23 10:45:41 SYSTEM DE-ENERGIZED CC-Sys
 2283 08/22/23 10:43:46 RUN END DATA CV-Sys Days To Next Exer: 1
 2282 08/22/23 10:43:46 RUN END DATA CV-Sys T: 478 755 18.2
 2281 08/22/23 10:43:46 RUN END DATA CV-Sys B: 499 779 18.0

2280 08/22/23 10:43:46 RUN END DATA	CV-Sys O: 846 1275 # 52
2279 08/22/23 10:43:46 RUN END DATA	CV-Sys 17:58h 7.65kh 425.68w
2278 08/22/23 10:43:46 CONTACT STOP	CV-Sys
2277 08/22/23 10:43:46 SYSTEM OUTPUT	CV-Sys 20.5v 53.0c 35.6c
2276 08/22/23 10:43:46 SYSTEM OUTPUT	CV-Sys Min O/T/B: 204w 143w 158w
2275 08/22/23 10:43:46 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1276w 741w 778w
2274 08/22/23 10:43:46 SYSTEM OUTPUT	CV-Sys Bot: 20.4v 6.8a 158w
2273 08/22/23 10:43:46 SYSTEM OUTPUT	CV-Sys Top: 20.4v 6.2a 143w
2272 08/22/23 10:43:46 SYSTEM OUTPUT	CV-Sys out: 52.6v 4.3a 225.8w
2271 08/22/23 10:29:03 SYSTEM OUTPUT	CV-Sys 18.1v 53.0c 58.0c
2270 08/22/23 10:29:03 SYSTEM OUTPUT	CV-Sys Min O/T/B: 625w 333w 346w
2269 08/22/23 10:29:03 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1274w 742w 777w
2268 08/22/23 10:29:03 SYSTEM OUTPUT	CV-Sys Bot: 18.1v 42.9a 777w
2267 08/22/23 10:29:03 SYSTEM OUTPUT	CV-Sys Top: 18.1v 39.0a 705w
2266 08/22/23 10:29:03 SYSTEM OUTPUT	CV-Sys out: 52.4v 23.2a 1218.0w
2265 08/22/23 10:14:03 SYSTEM OUTPUT	CV-Sys 17.3v 53.1c 54.7c
2264 08/22/23 10:14:03 SYSTEM OUTPUT	CV-Sys Min O/T/B: 623w 330w 352w
2263 08/22/23 10:14:03 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1277w 741w 773w
2262 08/22/23 10:14:03 SYSTEM OUTPUT	CV-Sys Bot: 17.3v 30.1a 521w
2261 08/22/23 10:14:03 SYSTEM OUTPUT	CV-Sys Top: 17.3v 29.9a 518w
2260 08/22/23 10:14:03 SYSTEM OUTPUT	CV-Sys out: 52.3v 19.3a 1009.8w
2259 08/22/23 09:59:03 SYSTEM OUTPUT	CV-Sys 17.6v 53.2c 49.8c
2258 08/22/23 09:59:03 SYSTEM OUTPUT	CV-Sys Min O/T/B: 624w 334w 351w
2257 08/22/23 09:59:03 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1282w 742w 778w
2256 08/22/23 09:59:03 SYSTEM OUTPUT	CV-Sys Bot: 17.6v 20.6a 362w
2255 08/22/23 09:59:03 SYSTEM OUTPUT	CV-Sys Top: 17.6v 20.3a 355w
2254 08/22/23 09:59:03 SYSTEM OUTPUT	CV-Sys out: 52.6v 12.4a 650.2w
2253 08/22/23 09:44:03 SYSTEM OUTPUT	CV-Sys 17.3v 52.3c 56.0c
2252 08/22/23 09:44:03 SYSTEM OUTPUT	CV-Sys Min O/T/B: 626w 336w 350w
2251 08/22/23 09:44:03 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1283w 754w 779w
2250 08/22/23 09:44:03 SYSTEM OUTPUT	CV-Sys Bot: 17.3v 34.6a 598w
2249 08/22/23 09:44:03 SYSTEM OUTPUT	CV-Sys Top: 17.3v 32.9a 569w
2248 08/22/23 09:44:03 SYSTEM OUTPUT	CV-Sys out: 52.6v 18.5a 976.1w
2247 08/22/23 09:29:03 SYSTEM OUTPUT	CV-Sys 18.0v 52.4c 58.1c
2246 08/22/23 09:29:03 SYSTEM OUTPUT	CV-Sys Min O/T/B: 629w 336w 353w
2245 08/22/23 09:29:03 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1275w 755w 779w
2244 08/22/23 09:29:03 SYSTEM OUTPUT	CV-Sys Bot: 18.0v 43.3a 779w
2243 08/22/23 09:29:03 SYSTEM OUTPUT	CV-Sys Top: 18.0v 39.3a 706w
2242 08/22/23 09:29:03 SYSTEM OUTPUT	CV-Sys out: 52.3v 24.2a 1265.9w
2241 08/22/23 09:14:03 SYSTEM OUTPUT	CV-Sys 17.3v 52.3c 52.7c
2240 08/22/23 09:14:03 SYSTEM OUTPUT	CV-Sys Min O/T/B: 135w 109w 122w
2239 08/22/23 09:14:03 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1274w 743w 772w
2238 08/22/23 09:14:03 SYSTEM OUTPUT	CV-Sys Bot: 17.3v 25.0a 432w
2237 08/22/23 09:14:03 SYSTEM OUTPUT	CV-Sys Top: 17.3v 25.5a 441w
2236 08/22/23 09:14:03 SYSTEM OUTPUT	CV-Sys out: 52.5v 15.7a 824.8w
2235 08/22/23 08:59:03 SYSTEM OUTPUT	CV-Sys 19.8v 31.6c 34.9c
2234 08/22/23 08:59:03 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
2233 08/22/23 08:59:03 SYSTEM OUTPUT	CV-Sys Max O/T/B: 397w 256w 235w
2232 08/22/23 08:59:03 SYSTEM OUTPUT	CV-Sys Bot: 19.8v 7.0a 138w
2231 08/22/23 08:59:03 SYSTEM OUTPUT	CV-Sys Top: 19.8v 7.0a 137w
2230 08/22/23 08:59:03 SYSTEM OUTPUT	CV-Sys out: 52.6v 2.6a 139.3w
2229 08/22/23 08:44:03 SYSTEM RUNNING	CV-Sys
2228 08/22/23 08:44:00 START UP DATA	CV-Sys Top/Bot OCV: 23.65v 23.83v

2227 08/22/23 08:43:54 SYSTEM START ATTEMPT CV-Sys Bot/Top Modules
 2226 08/22/23 08:43:46 START UP DATA CV-Sys Alarms: 0000000000000000
 2225 08/22/23 08:43:46 START UP DATA CV-Sys FID = E11CV:02.07.08.TM
 2224 08/22/23 08:43:46 START UP DATA CV-Sys FID = CC:02.07.08
 2223 08/22/23 08:43:46 START UP DATA CV-Sys LVS= 47.9,2,52.5,29.7
 2222 08/22/23 08:43:46 START UP DATA CV-Sys 51.5v,1730p,2.96v,2.98v
 2221 08/22/23 08:43:46 CONTACT START CV-Sys Contact SN: PPS23249002
 2220 08/22/23 08:43:24 RUN END DATA CV-Sys Days To Next Exer: 1
 2219 08/22/23 08:43:24 RUN END DATA CV-Sys T: 0 0 0.0
 2218 08/22/23 08:43:24 RUN END DATA CV-Sys B: 0 0 0.0
 2217 08/22/23 08:43:24 RUN END DATA CV-Sys O: 0 0 # 51
 2216 08/22/23 08:43:24 RUN END DATA CV-Sys 15:58h 5.96kh 373.13w
 2215 08/22/23 08:43:24 CONTACT STOP CV-Sys
 2214 08/22/23 08:43:24 SYSTEM START ATTEMPT CV-Sys Bot/Top Modules
 2213 08/22/23 08:43:14 USER LOGGED IN WEB ADMIN1
 2212 08/22/23 08:43:03 START UP DATA CV-Sys Alarms: 0000000000000000
 2211 08/22/23 08:43:03 START UP DATA CV-Sys FID = E11CV:02.07.08.TM
 2210 08/22/23 08:43:03 START UP DATA CV-Sys FID = CC:02.07.08
 2209 08/22/23 08:43:03 START UP DATA CV-Sys LVS= 47.9,2,52.5,29.5
 2208 08/22/23 08:43:03 START UP DATA CV-Sys 50.8v,1728p,2.28v,2.12v
 2207 08/22/23 08:43:03 CONTACT START CV-Sys Contact SN: PPS23249002
 2206 08/22/23 08:42:59 SYSTEM OUTPUT CV-Sys Bot: 21.9v 0.5a 0w
 2205 08/22/23 08:42:59 SYSTEM OUTPUT CV-Sys Top: 22.3v 0.2a 0w
 2204 08/22/23 08:42:58 EXERCISE DATE CHG CV-Sys Date was bad, Tomorrow Set
 2203 06/14/23 13:17:42 EXERCISE DATE CHG CV-Sys Date was bad, Tomorrow Set
 2202 06/14/23 13:17:42 CONV SYSTEM ENERGIZED CV-Sys Reset Status Reg: 0x48
 2201 08/22/23 08:42:58 SYSTEM ENERGIZED CC-Sys Reset Status Reg: 0x48
 2200 08/22/23 08:42:45 SYSTEM DE-ENERGIZED CC-Sys
 2199 08/22/23 08:39:51 RUN END DATA CV-Sys Days To Next Exer: 1
 2198 08/22/23 08:39:51 RUN END DATA CV-Sys T: 139 197 17.7
 2197 08/22/23 08:39:51 RUN END DATA CV-Sys B: 124 180 17.7
 2196 08/22/23 08:39:51 RUN END DATA CV-Sys O: 184 292 # 50
 2195 08/22/23 08:39:51 RUN END DATA CV-Sys 15:58h 5.96kh 373.13w
 2194 08/22/23 08:39:51 SYSTEM OUTPUT CV-Sys 21.6v 29.5c 40.2c
 2193 08/22/23 08:39:51 SYSTEM OUTPUT CV-Sys Min O/T/B: 0w 0w 0w
 2192 08/22/23 08:39:51 SYSTEM OUTPUT CV-Sys Max O/T/B: 294w 197w 179w
 2191 08/22/23 08:39:51 SYSTEM OUTPUT CV-Sys Bot: 21.1v 5.6a 179w
 2190 08/22/23 08:39:51 SYSTEM OUTPUT CV-Sys Top: 20.8v 9.3a 197w
 2189 08/22/23 08:39:51 SYSTEM OUTPUT CV-Sys out: 51.8v 5.7a 292.9w
 2188 08/22/23 08:39:51 SYSTEM RUN ENDED CV-Sys
 2187 08/22/23 08:39:51 ALARM ON CV-Sys Mj,No Pressure
 2186 08/22/23 08:39:26 SYSTEM RUNNING CV-Sys
 2185 08/22/23 08:39:23 START UP DATA CV-Sys Top/Bot OCV: 23.05v 22.69v
 2184 08/22/23 08:39:18 SYSTEM START ATTEMPT CV-Sys Bot/Top Modules
 2183 08/22/23 08:39:12 USER LOGGED IN WEB ADMIN1
 2182 08/22/23 08:38:58 START UP DATA CV-Sys Alarms: 0000000000000000
 2181 08/22/23 08:38:58 START UP DATA CV-Sys FID = E11CV:02.07.08.TM
 2180 08/22/23 08:38:58 START UP DATA CV-Sys FID = CC:02.07.08
 2179 08/22/23 08:38:58 START UP DATA CV-Sys LVS= 47.9,2,52.5,29.2
 2178 08/22/23 08:38:58 START UP DATA CV-Sys 50.8v,1728p,2.21v,2.05v
 2177 08/22/23 08:38:58 CONTACT START CV-Sys Contact SN: PPS23249002
 2176 08/22/23 08:38:53 SYSTEM OUTPUT CV-Sys Bot: 0.4v 0.5a 0w
 2175 08/22/23 08:38:53 SYSTEM OUTPUT CV-Sys Top: 17.8v 0.3a 0w

2174 08/22/23 08:38:52 EXERCISE DATE CHG CV-Sys Date was bad, Tomorrow Set
 2173 06/14/23 13:17:42 EXERCISE DATE CHG CV-Sys Date was bad, Tomorrow Set
 2172 06/14/23 13:17:42 CONV SYSTEM ENERGIZED CV-Sys Reset Status Reg: 0x48
 2171 08/22/23 08:38:51 SYSTEM ENERGIZED CC-Sys Reset Status Reg: 0x48
 2170 08/22/23 08:38:21 SYSTEM DE-ENERGIZED CC-Sys
 2169 08/22/23 08:25:14 RUN END DATA CV-Sys Days To Next Exer: 1
 2168 08/22/23 08:25:14 RUN END DATA CV-Sys T: 46 106 19.9
 2167 08/22/23 08:25:14 RUN END DATA CV-Sys B: 51 114 19.9
 2166 08/22/23 08:25:14 RUN END DATA CV-Sys O: 33 81 # 49
 2165 08/22/23 08:25:14 RUN END DATA CV-Sys 15:58h 5.96kh 373.23w
 2164 08/22/23 08:25:14 SYSTEM OUTPUT CV-Sys 22.1v 29.0c 31.3c
 2163 08/22/23 08:25:14 SYSTEM OUTPUT CV-Sys Min O/T/B: 0w 0w 0w
 2162 08/22/23 08:25:14 SYSTEM OUTPUT CV-Sys Max O/T/B: 84w 105w 114w
 2161 08/22/23 08:25:14 SYSTEM OUTPUT CV-Sys Bot: 21.7v 1.0a 94w
 2160 08/22/23 08:25:14 SYSTEM OUTPUT CV-Sys Top: 21.4v 1.6a 98w
 2159 08/22/23 08:25:14 SYSTEM OUTPUT CV-Sys out: 52.6v 1.5a 76.6w
 2158 08/22/23 08:25:14 SYSTEM RUN ENDED CV-Sys
 2157 08/22/23 08:25:14 ALARM ON CV-Sys Mj,No Pressure
 2156 08/22/23 08:23:30 SYSTEM RUNNING CV-Sys
 2155 08/22/23 08:23:27 START UP DATA CV-Sys Top/Bot OCV: 23.22v 22.62v
 2154 08/22/23 08:23:21 SYSTEM START ATTEMPT CV-Sys Bot/Top Modules
 2153 08/22/23 08:23:21 START UP DATA CV-Sys Alarms: 0000000000000000
 2152 08/22/23 08:23:21 START UP DATA CV-Sys FID = E11CV:02.07.08.TM
 2151 08/22/23 08:23:21 START UP DATA CV-Sys FID = CC:02.07.08
 2150 08/22/23 08:23:21 START UP DATA CV-Sys LVS= 47.9,2,52.5,30.1
 2149 08/22/23 08:23:21 START UP DATA CV-Sys 54.4v,1731p,2.91v,2.94v
 2148 08/22/23 08:23:21 CONTACT START CV-Sys Contact SN: PPS23249002
 2147 08/22/23 08:23:12 USER LOGGED IN WEB ADMIN1
 2146 08/22/23 08:23:00 INFO MESSAGE WEB Failed Login Attempt 1
 2145 08/22/23 08:22:35 SYSTEM OUTPUT CV-Sys Bot: 22.3v 0.5a 0w
 2144 08/22/23 08:22:35 SYSTEM OUTPUT CV-Sys Top: 22.5v 0.3a 0w
 2143 08/22/23 08:22:34 EXERCISE DATE CHG CV-Sys Date was bad, Tomorrow Set
 2142 06/14/23 13:17:42 EXERCISE DATE CHG CV-Sys Date was bad, Tomorrow Set
 2141 06/14/23 13:17:42 CONV SYSTEM ENERGIZED CV-Sys Reset Status Reg: 0x48
 2140 08/22/23 08:22:34 SYSTEM ENERGIZED CC-Sys Reset Status Reg: 0x48
 2139 08/22/23 08:21:56 SYSTEM DE-ENERGIZED CC-Sys
 2138 08/22/23 08:21:01 RUN END DATA CV-Sys Days To Next Exer: 1
 2137 08/22/23 08:21:01 RUN END DATA CV-Sys T: 88 134 19.4
 2136 08/22/23 08:21:01 RUN END DATA CV-Sys B: 104 152 19.2
 2135 08/22/23 08:21:01 RUN END DATA CV-Sys O: 114 175 # 48
 2134 08/22/23 08:21:01 RUN END DATA CV-Sys 15:56h 5.96kh 373.85w
 2133 08/22/23 08:21:01 SYSTEM OUTPUT CV-Sys 22.1v 30.2c 28.7c
 2132 08/22/23 08:21:01 SYSTEM OUTPUT CV-Sys Min O/T/B: 0w 0w 0w
 2131 08/22/23 08:21:01 SYSTEM OUTPUT CV-Sys Max O/T/B: 173w 134w 152w
 2130 08/22/23 08:21:01 SYSTEM OUTPUT CV-Sys Bot: 21.8v 0.9a 65w
 2129 08/22/23 08:21:01 SYSTEM OUTPUT CV-Sys Top: 21.5v 1.6a 73w
 2128 08/22/23 08:21:01 SYSTEM OUTPUT CV-Sys out: 52.7v 1.3a 68.9w
 2127 08/22/23 08:21:01 SYSTEM RUN ENDED CV-Sys
 2126 08/22/23 08:21:01 ALARM ON CV-Sys Mj,No Pressure
 2125 08/22/23 08:20:24 SYSTEM RUNNING CV-Sys
 2124 08/22/23 08:20:21 START UP DATA CV-Sys Top/Bot OCV: 23.65v 23.58v
 2123 08/22/23 08:20:15 SYSTEM START ATTEMPT CV-Sys Bot/Top Modules
 2122 08/22/23 08:20:02 START UP DATA CV-Sys Alarms: 0000000000000000

2121 08/22/23 08:20:02 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2120 08/22/23 08:20:02 START UP DATA	CV-Sys FID = CC:02.07.08
2119 08/22/23 08:20:02 START UP DATA	CV-Sys LVS= 47.9,2,52.5,29.6
2118 08/22/23 08:20:02 START UP DATA	CV-Sys 54.2v,1733p,2.90v,2.92v
2117 08/22/23 08:20:02 CONTACT START	CV-Sys Contact SN: PPS23249002
2116 08/22/23 08:19:45 RUN END DATA	CV-Sys Days To Next Exer: 1
2115 08/22/23 08:19:45 RUN END DATA	CV-Sys T: 0 0 0.0
2114 08/22/23 08:19:45 RUN END DATA	CV-Sys B: 0 0 0.0
2113 08/22/23 08:19:45 RUN END DATA	CV-Sys O: 0 0 # 47
2112 08/22/23 08:19:45 RUN END DATA	CV-Sys 15:56h 5.96kh 374.03w
2111 08/22/23 08:19:45 CONTACT STOP	CV-Sys
2110 08/22/23 08:19:45 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2109 08/22/23 08:19:35 USER LOGGED IN	WEB ADMIN1
2108 08/22/23 08:19:24 START UP DATA	CV-Sys Alarms: 0000000000000000
2107 08/22/23 08:19:24 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2106 08/22/23 08:19:24 START UP DATA	CV-Sys FID = CC:02.07.08
2105 08/22/23 08:19:24 START UP DATA	CV-Sys LVS= 47.9,2,52.5,29.7
2104 08/22/23 08:19:24 START UP DATA	CV-Sys 52.7v,1728p,2.02v,1.91v
2103 08/22/23 08:19:24 CONTACT START	CV-Sys Contact SN: PPS23249002
2102 08/22/23 08:19:20 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.9a 0w
2101 08/22/23 08:19:20 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.8a 0w
2100 08/22/23 08:19:19 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
2099 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
2098 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48
2097 08/22/23 08:19:19 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48
2096 08/22/23 07:06:02 SYSTEM DE-ENERGIZED	CC-Sys
2095 08/22/23 07:04:34 RUN END DATA	CV-Sys Days To Next Exer: 1
2094 08/22/23 07:04:34 RUN END DATA	CV-Sys T: 450 646 17.2
2093 08/22/23 07:04:34 RUN END DATA	CV-Sys B: 498 753 16.8
2092 08/22/23 07:04:34 RUN END DATA	CV-Sys O: 824 1190 # 46
2091 08/22/23 07:04:34 RUN END DATA	CV-Sys 15:56h 5.96kh 374.03w
2090 08/22/23 07:04:34 SYSTEM OUTPUT	CV-Sys 22.0v 37.3c 44.3c
2089 08/22/23 07:04:34 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
2088 08/22/23 07:04:34 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1190w 645w 752w
2087 08/22/23 07:04:34 SYSTEM OUTPUT	CV-Sys Bot: 21.6v 10.3a 279w
2086 08/22/23 07:04:34 SYSTEM OUTPUT	CV-Sys Top: 21.2v 10.8a 244w
2085 08/22/23 07:04:34 SYSTEM OUTPUT	CV-Sys out: 52.7v 7.8a 412.8w
2084 08/22/23 07:04:34 SYSTEM RUN ENDED	CV-Sys
2083 08/22/23 07:04:34 ALARM ON	CV-Sys Mj, No Pressure
2082 08/22/23 07:04:02 SYSTEM RUNNING	CV-Sys
2081 08/22/23 07:03:59 START UP DATA	CV-Sys Top/Bot OCV: 23.28v 23.09v
2080 08/22/23 07:03:53 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2079 08/22/23 07:03:53 START UP DATA	CV-Sys Alarms: 0000000000000000
2078 08/22/23 07:03:53 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2077 08/22/23 07:03:53 START UP DATA	CV-Sys FID = CC:02.07.08
2076 08/22/23 07:03:53 START UP DATA	CV-Sys LVS= 47.9,2,52.5,34.7
2075 08/22/23 07:03:53 START UP DATA	CV-Sys 53.4v,1736p,2.97v,3.00v
2074 08/22/23 07:03:53 CONTACT START	CV-Sys Contact SN: PPS23249002
2073 08/22/23 07:03:37 USER LOGGED IN	WEB ADMIN1
2072 08/22/23 07:03:13 LOW PRESSURE ALERT OFF	CC-Sys
2071 08/22/23 07:03:13 ALARM OFF	CC-Sys Mn,H2 Low Pressure
2070 08/22/23 07:03:12 LOW PRESSURE ALERT ON	CC-Sys
2069 08/22/23 07:03:12 ALARM ON	CC-Sys Mn,H2 Low Pressure

2068 08/22/23 07:02:50 SYSTEM OUTPUT	CV-Sys Bot: 0.4v 0.5a 0w
2067 08/22/23 07:02:50 SYSTEM OUTPUT	CV-Sys Top: 18.6v 0.4a 0w
2066 08/22/23 07:02:49 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
2065 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
2064 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48
2063 08/22/23 07:02:48 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48
2062 08/22/23 07:00:22 SYSTEM DE-ENERGIZED	CC-Sys
2061 08/22/23 06:52:11 RUN END DATA	CV-Sys Days To Next Exer: 1
2060 08/22/23 06:52:11 RUN END DATA	CV-Sys T: 456 653 17.5
2059 08/22/23 06:52:11 RUN END DATA	CV-Sys B: 507 729 17.2
2058 08/22/23 06:52:11 RUN END DATA	CV-Sys O: 848 1237 # 45
2057 08/22/23 06:52:11 RUN END DATA	CV-Sys 15:55h 5.95kh 373.80w
2056 08/22/23 06:52:11 SYSTEM OUTPUT	CV-Sys 22.0v 36.4c 46.6c
2055 08/22/23 06:52:11 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
2054 08/22/23 06:52:11 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1240w 653w 728w
2053 08/22/23 06:52:11 SYSTEM OUTPUT	CV-Sys Bot: 21.5v 12.2a 317w
2052 08/22/23 06:52:11 SYSTEM OUTPUT	CV-Sys Top: 21.2v 12.9a 285w
2051 08/22/23 06:52:11 SYSTEM OUTPUT	CV-Sys out: 52.6v 10.8a 570.1w
2050 08/22/23 06:52:11 SYSTEM RUN ENDED	CV-Sys
2049 08/22/23 06:52:11 ALARM ON	CV-Sys Mj, No Pressure
2048 08/22/23 06:51:39 SYSTEM RUNNING	CV-Sys
2047 08/22/23 06:51:36 START UP DATA	CV-Sys Top/Bot OCV: 23.67v 23.42v
2046 08/22/23 06:51:30 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2045 08/22/23 06:51:30 START UP DATA	CV-Sys Alarms: 0000000000000000
2044 08/22/23 06:51:30 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2043 08/22/23 06:51:30 START UP DATA	CV-Sys FID = CC:02.07.08
2042 08/22/23 06:51:30 START UP DATA	CV-Sys LVS= 47.9,2,52.5,33.9
2041 08/22/23 06:51:30 START UP DATA	CV-Sys 53.5v,1736p,2.98v,3.01v
2040 08/22/23 06:51:30 CONTACT START	CV-Sys Contact SN: PPS23249002
2039 08/22/23 06:50:35 RUN END DATA	CV-Sys Days To Next Exer: 1
2038 08/22/23 06:50:35 RUN END DATA	CV-Sys T: 0 0 0.0
2037 08/22/23 06:50:35 RUN END DATA	CV-Sys B: 0 0 0.0
2036 08/22/23 06:50:35 RUN END DATA	CV-Sys O: 0 0 # 44
2035 08/22/23 06:50:35 RUN END DATA	CV-Sys 15:55h 5.94kh 373.50w
2034 08/22/23 06:50:35 CONTACT STOP	CV-Sys
2033 08/22/23 06:50:35 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2032 08/22/23 06:50:28 USER LOGGED IN	WEB ADMIN1
2031 08/22/23 06:50:14 START UP DATA	CV-Sys Alarms: 0000000000000000
2030 08/22/23 06:50:14 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
2029 08/22/23 06:50:14 START UP DATA	CV-Sys FID = CC:02.07.08
2028 08/22/23 06:50:14 START UP DATA	CV-Sys LVS= 47.9,2,52.5,34.0
2027 08/22/23 06:50:14 START UP DATA	CV-Sys 53.4v,1731p,2.02v,1.76v
2026 08/22/23 06:50:14 CONTACT START	CV-Sys Contact SN: PPS23249002
2025 08/22/23 06:50:10 SYSTEM OUTPUT	CV-Sys Bot: 0.4v 0.5a 0w
2024 08/22/23 06:50:10 SYSTEM OUTPUT	CV-Sys Top: 1.3v 0.4a 0w
2023 08/22/23 06:50:09 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
2022 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
2021 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48
2020 08/22/23 06:50:09 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48
2019 08/22/23 06:46:32 SYSTEM DE-ENERGIZED	CC-Sys
2018 08/22/23 06:33:44 RUN END DATA	CV-Sys Days To Next Exer: 1
2017 08/22/23 06:33:44 RUN END DATA	CV-Sys T: 484 686 17.8
2016 08/22/23 06:33:44 RUN END DATA	CV-Sys B: 512 696 17.1

2015 08/22/23 06:33:44 RUN END DATA	CV-Sys O: 902 1206 # 43
2014 08/22/23 06:33:44 RUN END DATA	CV-Sys 15:55h 5.94kh 373.50w
2013 08/22/23 06:33:44 SYSTEM OUTPUT	CV-Sys 22.0v 37.3c 52.0c
2012 08/22/23 06:33:44 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
2011 08/22/23 06:33:44 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1210w 686w 695w
2010 08/22/23 06:33:44 SYSTEM OUTPUT	CV-Sys Bot: 21.7v 20.5a 454w
2009 08/22/23 06:33:44 SYSTEM OUTPUT	CV-Sys Top: 21.3v 21.2a 419w
2008 08/22/23 06:33:44 SYSTEM OUTPUT	CV-Sys out: 52.7v 13.2a 693.8w
2007 08/22/23 06:33:44 SYSTEM RUN ENDED	CV-Sys
2006 08/22/23 06:33:44 ALARM ON	CV-Sys Mj,No Pressure
2005 08/22/23 06:33:32 USER LOGGED IN	WEB ADMIN1
2004 08/22/23 06:33:11 SYSTEM RUNNING	CV-Sys
2003 08/22/23 06:33:08 START UP DATA	CV-Sys Top/Bot OCV: 22.93v 22.68v
2002 08/22/23 06:33:03 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
2001 08/22/23 06:33:00 START UP DATA	CV-Sys Alarms: 0000000000000000
2000 08/22/23 06:33:00 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1999 08/22/23 06:33:00 START UP DATA	CV-Sys FID = CC:02.07.08
1998 08/22/23 06:33:00 START UP DATA	CV-Sys LVS= 47.9,2,52.5,34.6
1997 08/22/23 06:33:00 START UP DATA	CV-Sys 53.8v,1738p,2.99v,3.00v
1996 08/22/23 06:33:00 CONTACT START	CV-Sys Contact SN: PPS23249002
1995 08/22/23 06:32:38 SYSTEM OUTPUT	CV-Sys Bot: 18.3v 0.7a 0w
1994 08/22/23 06:32:38 SYSTEM OUTPUT	CV-Sys Top: 22.0v 0.5a 0w
1993 08/22/23 06:32:37 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
1992 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
1991 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48
1990 08/22/23 06:32:36 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48
1989 08/22/23 06:32:21 SYSTEM DE-ENERGIZED	CC-Sys
1988 08/22/23 06:27:45 RUN END DATA	CV-Sys Days To Next Exer: 20
1987 08/22/23 06:27:45 RUN END DATA	CV-Sys T: 475 774 16.1
1986 08/22/23 06:27:45 RUN END DATA	CV-Sys B: 515 814 16.1
1985 08/22/23 06:27:45 RUN END DATA	CV-Sys O: 883 1445 # 42
1984 08/22/23 06:27:45 RUN END DATA	CV-Sys 15:54h 5.93kh 373.21w
1983 08/22/23 06:27:45 SYSTEM OUTPUT	CV-Sys 22.0v 34.2c 57.4c
1982 08/22/23 06:27:45 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1981 08/22/23 06:27:45 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1444w 774w 813w
1980 08/22/23 06:27:45 SYSTEM OUTPUT	CV-Sys Bot: 21.5v 25.9a 591w
1979 08/22/23 06:27:45 SYSTEM OUTPUT	CV-Sys Top: 21.1v 34.0a 681w
1978 08/22/23 06:27:45 SYSTEM OUTPUT	CV-Sys out: 51.7v 23.2a 1196.4w
1977 08/22/23 06:27:45 SYSTEM RUN ENDED	CV-Sys
1976 08/22/23 06:27:45 ALARM ON	CV-Sys Mj,No Pressure
1975 08/22/23 06:27:12 SYSTEM RUNNING	CV-Sys
1974 08/22/23 06:27:09 START UP DATA	CV-Sys Top/Bot OCV: 23.90v 23.75v
1973 08/22/23 06:27:04 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1972 08/22/23 06:27:03 START UP DATA	CV-Sys Alarms: 0000000000000000
1971 08/22/23 06:27:03 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1970 08/22/23 06:27:03 START UP DATA	CV-Sys FID = CC:02.07.08
1969 08/22/23 06:27:03 START UP DATA	CV-Sys LVS= 47.9,2,52.5,30.9
1968 08/22/23 06:27:03 START UP DATA	CV-Sys 51.3v,1745p,3.01v,3.03v
1967 08/22/23 06:27:03 CONTACT START	CV-Sys Contact SN: PPS23249002
1966 08/22/23 06:21:49 USER LOGGED IN	WEB ADMIN1
1965 08/22/23 06:21:35 INFO MESSAGE	WEB Failed Login Attempt 1
1964 08/22/23 06:21:21 USER LOGGED OUT	WEB ADMIN1
1963 08/22/23 06:21:15 USER LOGGED OUT	WEB ADMIN1

1962 08/22/23 00:00:02 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.6a 0w
1961 08/22/23 00:00:02 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.4a 0w
1960 08/22/23 00:00:01 DAILY TEMPS	CC-Sys CC: High = 31 , Low = 31
1959 08/21/23 17:14:46 SYSTEM OUTPUT	CV-Sys Bot: 0.1v 0.4a 0w
1958 08/21/23 17:14:46 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.2a 0w
1957 08/21/23 16:59:46 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.2a 0w
1956 08/21/23 16:59:46 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.1a 0w
1955 08/21/23 16:44:46 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.4a 0w
1954 08/21/23 16:44:46 SYSTEM OUTPUT	CV-Sys Top: 0.6v 0.2a 0w
1953 08/21/23 16:29:46 SYSTEM OUTPUT	CV-Sys Bot: 2.6v 0.4a 1w
1952 08/21/23 16:29:46 SYSTEM OUTPUT	CV-Sys Top: 22.5v 0.4a 8w
1951 08/21/23 16:14:46 RUN END DATA	CV-Sys Days To Next Exer: 21
1950 08/21/23 16:14:46 RUN END DATA	CV-Sys T: 64 148 18.1
1949 08/21/23 16:14:46 RUN END DATA	CV-Sys B: 91 157 18.1
1948 08/21/23 16:14:46 RUN END DATA	CV-Sys O: 96 274 # 41
1947 08/21/23 16:14:46 RUN END DATA	CV-Sys 15:53h 5.92kh 372.93w
1946 08/21/23 16:14:46 CONTACT STOP	CV-Sys
1945 08/21/23 16:14:46 SYSTEM OUTPUT	CV-Sys 21.0v 29.7c 26.2c
1944 08/21/23 16:14:45 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1943 08/21/23 16:14:45 SYSTEM OUTPUT	CV-Sys Max O/T/B: 262w 148w 156w
1942 08/21/23 16:14:45 SYSTEM OUTPUT	CV-Sys Bot: 21.1v 2.2a 39w
1941 08/21/23 16:14:45 SYSTEM OUTPUT	CV-Sys Top: 21.0v 2.1a 41w
1940 08/21/23 16:14:45 SYSTEM OUTPUT	CV-Sys out: 52.9v 0.6a 33.1w
1939 08/21/23 16:14:20 SYSTEM RUNNING	CV-Sys
1938 08/21/23 16:14:17 START UP DATA	CV-Sys Top/Bot OCV: 23.42v 23.44v
1937 08/21/23 16:14:11 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1936 08/21/23 16:14:11 START UP DATA	CV-Sys Alarms: 0000000000000000
1935 08/21/23 16:14:11 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1934 08/21/23 16:14:11 START UP DATA	CV-Sys FID = CC:02.07.08
1933 08/21/23 16:14:11 START UP DATA	CV-Sys LVS= 47.9,2,52.5,29.4
1932 08/21/23 16:14:11 START UP DATA	CV-Sys 53.9v,1740p,3.02v,3.04v
1931 08/21/23 16:14:11 CONTACT START	CV-Sys Contact SN: PPS23249002
1930 08/21/23 13:44:56 SYSTEM OUTPUT	CV-Sys Bot: 0.1v 0.5a 0w
1929 08/21/23 13:44:56 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.3a 0w
1928 08/21/23 13:29:56 SYSTEM OUTPUT	CV-Sys Bot: 0.1v 0.7a 0w
1927 08/21/23 13:29:56 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.3a 0w
1926 08/21/23 13:14:56 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.6a 0w
1925 08/21/23 13:14:56 SYSTEM OUTPUT	CV-Sys Top: 0.4v 0.5a 0w
1924 08/21/23 12:59:56 SYSTEM OUTPUT	CV-Sys Bot: 0.8v 0.4a 0w
1923 08/21/23 12:59:56 SYSTEM OUTPUT	CV-Sys Top: 20.0v 0.3a 6w
1922 08/21/23 12:44:57 RUN END DATA	CV-Sys Days To Next Exer: 21
1921 08/21/23 12:44:57 RUN END DATA	CV-Sys T: 340 512 17.3
1920 08/21/23 12:44:57 RUN END DATA	CV-Sys B: 365 582 17.9
1919 08/21/23 12:44:57 RUN END DATA	CV-Sys O: 590 921 # 40
1918 08/21/23 12:44:57 RUN END DATA	CV-Sys 15:53h 5.92kh 373.03w
1917 08/21/23 12:44:57 CONTACT STOP	CV-Sys
1916 08/21/23 12:44:56 SYSTEM OUTPUT	CV-Sys 20.7v 44.3c 33.3c
1915 08/21/23 12:44:56 SYSTEM OUTPUT	CV-Sys Min O/T/B: 102w 99w 146w
1914 08/21/23 12:44:56 SYSTEM OUTPUT	CV-Sys Max O/T/B: 795w 464w 492w
1913 08/21/23 12:44:56 SYSTEM OUTPUT	CV-Sys Bot: 20.8v 4.3a 146w
1912 08/21/23 12:44:56 SYSTEM OUTPUT	CV-Sys Top: 20.8v 3.6a 99w
1911 08/21/23 12:44:56 SYSTEM OUTPUT	CV-Sys out: 52.6v 2.4a 126.4w
1910 08/21/23 12:40:21 SYSTEM OUTPUT	CV-Sys 18.4v 44.8c 44.3c

1909 08/21/23 12:40:21 SYSTEM OUTPUT	CV-Sys Min O/T/B: 385w 211w 223w
1908 08/21/23 12:40:21 SYSTEM OUTPUT	CV-Sys Max O/T/B: 796w 466w 501w
1907 08/21/23 12:40:21 SYSTEM OUTPUT	CV-Sys Bot: 18.4v 15.1a 277w
1906 08/21/23 12:40:21 SYSTEM OUTPUT	CV-Sys Top: 18.4v 13.2a 242w
1905 08/21/23 12:40:21 SYSTEM OUTPUT	CV-Sys out: 52.6v 7.5a 396.2w
1904 08/21/23 12:39:19 LOW VOLT START CHG	WEB Setting = 47.9
1903 08/21/23 12:38:44 EXERCISE DATE CHG	WEB User changed exercise day
1902 08/21/23 12:38:35 EXERCISE DATE CHG	WEB Reset due Exer Mode chg
1901 08/21/23 12:38:35 EXERCISE MODE CHG	WEB [AutoSchedule]
1900 08/21/23 12:37:54 USER LOGGED IN	WEB ADMIN1
1899 08/21/23 12:37:45 USER LOGGED OUT	WEB ADMIN1
1898 08/21/23 12:37:39 USER LOGGED OUT	WEB ADMIN1
1897 08/21/23 12:25:21 SYSTEM OUTPUT	CV-Sys 18.4v 44.6c 47.4c
1896 08/21/23 12:25:21 SYSTEM OUTPUT	CV-Sys Min O/T/B: 386w 214w 233w
1895 08/21/23 12:25:21 SYSTEM OUTPUT	CV-Sys Max O/T/B: 794w 468w 502w
1894 08/21/23 12:25:21 SYSTEM OUTPUT	CV-Sys Bot: 18.3v 18.7a 343w
1893 08/21/23 12:25:21 SYSTEM OUTPUT	CV-Sys Top: 18.4v 16.0a 293w
1892 08/21/23 12:25:21 SYSTEM OUTPUT	CV-Sys out: 52.7v 9.3a 489.0w
1891 08/21/23 12:10:21 SYSTEM OUTPUT	CV-Sys 18.3v 45.2c 52.5c
1890 08/21/23 12:10:21 SYSTEM OUTPUT	CV-Sys Min O/T/B: 384w 216w 229w
1889 08/21/23 12:10:21 SYSTEM OUTPUT	CV-Sys Max O/T/B: 797w 468w 496w
1888 08/21/23 12:10:21 SYSTEM OUTPUT	CV-Sys Bot: 18.3v 25.1a 458w
1887 08/21/23 12:10:21 SYSTEM OUTPUT	CV-Sys Top: 18.3v 24.8a 453w
1886 08/21/23 12:10:21 SYSTEM OUTPUT	CV-Sys out: 52.5v 14.6a 766.1w
1885 08/21/23 11:55:21 SYSTEM OUTPUT	CV-Sys 18.2v 44.6c 51.2c
1884 08/21/23 11:55:21 SYSTEM OUTPUT	CV-Sys Min O/T/B: 384w 212w 235w
1883 08/21/23 11:55:21 SYSTEM OUTPUT	CV-Sys Max O/T/B: 797w 462w 501w
1882 08/21/23 11:55:21 SYSTEM OUTPUT	CV-Sys Bot: 18.2v 22.8a 415w
1881 08/21/23 11:55:21 SYSTEM OUTPUT	CV-Sys Top: 18.2v 22.3a 405w
1880 08/21/23 11:55:21 SYSTEM OUTPUT	CV-Sys out: 52.4v 14.2a 742.0w
1879 08/21/23 11:40:21 SYSTEM OUTPUT	CV-Sys 18.2v 44.6c 44.7c
1878 08/21/23 11:40:21 SYSTEM OUTPUT	CV-Sys Min O/T/B: 385w 212w 230w
1877 08/21/23 11:40:21 SYSTEM OUTPUT	CV-Sys Max O/T/B: 795w 461w 497w
1876 08/21/23 11:40:21 SYSTEM OUTPUT	CV-Sys Bot: 18.2v 15.4a 279w
1875 08/21/23 11:40:21 SYSTEM OUTPUT	CV-Sys Top: 18.1v 13.6a 246w
1874 08/21/23 11:40:21 SYSTEM OUTPUT	CV-Sys out: 52.6v 8.2a 428.9w
1873 08/21/23 11:25:21 SYSTEM OUTPUT	CV-Sys 18.6v 44.8c 45.8c
1872 08/21/23 11:25:21 SYSTEM OUTPUT	CV-Sys Min O/T/B: 384w 213w 227w
1871 08/21/23 11:25:21 SYSTEM OUTPUT	CV-Sys Max O/T/B: 796w 462w 496w
1870 08/21/23 11:25:21 SYSTEM OUTPUT	CV-Sys Bot: 18.6v 16.9a 314w
1869 08/21/23 11:25:21 SYSTEM OUTPUT	CV-Sys Top: 18.6v 14.2a 264w
1868 08/21/23 11:25:21 SYSTEM OUTPUT	CV-Sys out: 52.7v 8.2a 434.4w
1867 08/21/23 11:10:21 SYSTEM OUTPUT	CV-Sys 18.1v 44.5c 52.4c
1866 08/21/23 11:10:21 SYSTEM OUTPUT	CV-Sys Min O/T/B: 385w 211w 229w
1865 08/21/23 11:10:21 SYSTEM OUTPUT	CV-Sys Max O/T/B: 794w 459w 498w
1864 08/21/23 11:10:21 SYSTEM OUTPUT	CV-Sys Bot: 18.1v 24.9a 450w
1863 08/21/23 11:10:21 SYSTEM OUTPUT	CV-Sys Top: 18.1v 24.5a 443w
1862 08/21/23 11:10:21 SYSTEM OUTPUT	CV-Sys out: 52.5v 14.0a 736.1w
1861 08/21/23 10:55:21 SYSTEM OUTPUT	CV-Sys 18.6v 44.5c 51.8c
1860 08/21/23 10:55:21 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1859 08/21/23 10:55:21 SYSTEM OUTPUT	CV-Sys Max O/T/B: 921w 512w 582w
1858 08/21/23 10:55:21 SYSTEM OUTPUT	CV-Sys Bot: 18.6v 23.8a 443w
1857 08/21/23 10:55:21 SYSTEM OUTPUT	CV-Sys Top: 18.6v 23.3a 433w

1856 08/21/23 10:55:21 SYSTEM OUTPUT	CV-Sys out: 52.5v 14.6a 764.3w
1855 08/21/23 10:40:21 SYSTEM RUNNING	CV-Sys
1854 08/21/23 10:40:18 START UP DATA	CV-Sys Top/Bot OCV: 22.72v 22.88v
1853 08/21/23 10:40:12 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1852 08/21/23 10:40:12 START UP DATA	CV-Sys Alarms: 0000000000000000
1851 08/21/23 10:40:12 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1850 08/21/23 10:40:12 START UP DATA	CV-Sys FID = CC:02.07.08
1849 08/21/23 10:40:12 START UP DATA	CV-Sys LVS= 48.0,2,52.5,35.1
1848 08/21/23 10:40:12 START UP DATA	CV-Sys 52.3v,1463p,3.01v,3.03v
1847 08/21/23 10:40:12 CONTACT START	CV-Sys Contact SN: PPS23249002
1846 08/21/23 10:39:05 SYSTEM OUTPUT	CV-Sys Bot: 0.9v 0.3a 0w
1845 08/21/23 10:39:05 SYSTEM OUTPUT	CV-Sys Top: 21.4v 0.2a 3w
1844 08/21/23 10:24:05 RUN END DATA	CV-Sys Days To Next Exer: 18
1843 08/21/23 10:24:05 RUN END DATA	CV-Sys T: 209 294 17.4
1842 08/21/23 10:24:05 RUN END DATA	CV-Sys B: 228 318 17.4
1841 08/21/23 10:24:05 RUN END DATA	CV-Sys O: 324 510 # 39
1840 08/21/23 10:24:05 RUN END DATA	CV-Sys 13:48h 4.70kh 340.43w
1839 08/21/23 10:24:05 CONTACT STOP	CV-Sys
1838 08/21/23 10:24:05 SYSTEM OUTPUT	CV-Sys 20.7v 38.3c 29.1c
1837 08/21/23 10:24:05 SYSTEM OUTPUT	CV-Sys Min O/T/B: 50w 64w 86w
1836 08/21/23 10:24:05 SYSTEM OUTPUT	CV-Sys Max O/T/B: 435w 273w 305w
1835 08/21/23 10:24:05 SYSTEM OUTPUT	CV-Sys Bot: 20.7v 4.0a 86w
1834 08/21/23 10:24:05 SYSTEM OUTPUT	CV-Sys Top: 20.7v 3.1a 64w
1833 08/21/23 10:24:05 SYSTEM OUTPUT	CV-Sys out: 52.6v 1.3a 68.5w
1832 08/21/23 10:20:59 SYSTEM OUTPUT	CV-Sys 19.2v 37.9c 43.9c
1831 08/21/23 10:20:59 SYSTEM OUTPUT	CV-Sys Min O/T/B: 217w 134w 152w
1830 08/21/23 10:20:59 SYSTEM OUTPUT	CV-Sys Max O/T/B: 434w 279w 316w
1829 08/21/23 10:20:59 SYSTEM OUTPUT	CV-Sys Bot: 19.2v 15.2a 292w
1828 08/21/23 10:20:59 SYSTEM OUTPUT	CV-Sys Top: 19.2v 12.3a 236w
1827 08/21/23 10:20:59 SYSTEM OUTPUT	CV-Sys out: 52.6v 7.8a 410.8w
1826 08/21/23 10:05:59 SYSTEM OUTPUT	CV-Sys 19.2v 37.8c 42.7c
1825 08/21/23 10:05:59 SYSTEM OUTPUT	CV-Sys Min O/T/B: 214w 138w 152w
1824 08/21/23 10:05:59 SYSTEM OUTPUT	CV-Sys Max O/T/B: 434w 279w 310w
1823 08/21/23 10:05:59 SYSTEM OUTPUT	CV-Sys Bot: 19.2v 12.8a 245w
1822 08/21/23 10:05:59 SYSTEM OUTPUT	CV-Sys Top: 19.2v 12.6a 241w
1821 08/21/23 10:05:59 SYSTEM OUTPUT	CV-Sys out: 52.5v 7.2a 377.1w
1820 08/21/23 09:50:59 SYSTEM OUTPUT	CV-Sys 19.1v 37.8c 43.0c
1819 08/21/23 09:50:59 SYSTEM OUTPUT	CV-Sys Min O/T/B: 218w 131w 150w
1818 08/21/23 09:50:59 SYSTEM OUTPUT	CV-Sys Max O/T/B: 432w 280w 313w
1817 08/21/23 09:50:59 SYSTEM OUTPUT	CV-Sys Bot: 19.1v 12.9a 246w
1816 08/21/23 09:50:59 SYSTEM OUTPUT	CV-Sys Top: 19.0v 12.9a 245w
1815 08/21/23 09:50:59 SYSTEM OUTPUT	CV-Sys out: 52.5v 7.3a 385.0w
1814 08/21/23 09:35:59 SYSTEM OUTPUT	CV-Sys 19.0v 38.1c 42.1c
1813 08/21/23 09:35:59 SYSTEM OUTPUT	CV-Sys Min O/T/B: 157w 134w 152w
1812 08/21/23 09:35:59 SYSTEM OUTPUT	CV-Sys Max O/T/B: 434w 278w 307w
1811 08/21/23 09:35:59 SYSTEM OUTPUT	CV-Sys Bot: 19.0v 13.1a 248w
1810 08/21/23 09:35:59 SYSTEM OUTPUT	CV-Sys Top: 19.0v 11.3a 215w
1809 08/21/23 09:35:59 SYSTEM OUTPUT	CV-Sys out: 52.6v 6.9a 361.6w
1808 08/21/23 09:20:59 SYSTEM OUTPUT	CV-Sys 19.0v 37.8c 42.1c
1807 08/21/23 09:20:59 SYSTEM OUTPUT	CV-Sys Min O/T/B: 214w 135w 146w
1806 08/21/23 09:20:59 SYSTEM OUTPUT	CV-Sys Max O/T/B: 438w 281w 309w
1805 08/21/23 09:20:59 SYSTEM OUTPUT	CV-Sys Bot: 19.0v 13.5a 255w
1804 08/21/23 09:20:59 SYSTEM OUTPUT	CV-Sys Top: 19.0v 10.9a 206w

1803 08/21/23 09:20:59 SYSTEM OUTPUT	CV-Sys out: 52.6v 7.0a 367.1w
1802 08/21/23 09:05:59 SYSTEM OUTPUT	CV-Sys 18.8v 37.9c 40.6c
1801 08/21/23 09:05:59 SYSTEM OUTPUT	CV-Sys Min O/T/B: 217w 138w 146w
1800 08/21/23 09:05:59 SYSTEM OUTPUT	CV-Sys Max O/T/B: 432w 282w 305w
1799 08/21/23 09:05:59 SYSTEM OUTPUT	CV-Sys Bot: 18.8v 10.9a 204w
1798 08/21/23 09:05:59 SYSTEM OUTPUT	CV-Sys Top: 18.8v 11.0a 206w
1797 08/21/23 09:05:59 SYSTEM OUTPUT	CV-Sys out: 52.6v 5.8a 307.1w
1796 08/21/23 08:50:59 SYSTEM OUTPUT	CV-Sys 19.1v 37.8c 40.5c
1795 08/21/23 08:50:59 SYSTEM OUTPUT	CV-Sys Min O/T/B: 218w 139w 146w
1794 08/21/23 08:50:59 SYSTEM OUTPUT	CV-Sys Max O/T/B: 436w 281w 305w
1793 08/21/23 08:50:59 SYSTEM OUTPUT	CV-Sys Bot: 19.1v 10.7a 204w
1792 08/21/23 08:50:59 SYSTEM OUTPUT	CV-Sys Top: 19.1v 11.0a 209w
1791 08/21/23 08:50:59 SYSTEM OUTPUT	CV-Sys out: 52.6v 5.8a 307.2w
1790 08/21/23 08:35:59 SYSTEM OUTPUT	CV-Sys 19.0v 38.2c 38.9c
1789 08/21/23 08:35:59 SYSTEM OUTPUT	CV-Sys Min O/T/B: 218w 136w 146w
1788 08/21/23 08:35:59 SYSTEM OUTPUT	CV-Sys Max O/T/B: 437w 285w 305w
1787 08/21/23 08:35:59 SYSTEM OUTPUT	CV-Sys Bot: 19.0v 10.3a 196w
1786 08/21/23 08:35:59 SYSTEM OUTPUT	CV-Sys Top: 19.0v 9.0a 171w
1785 08/21/23 08:35:59 SYSTEM OUTPUT	CV-Sys out: 52.6v 4.7a 247.7w
1784 08/21/23 08:20:59 SYSTEM OUTPUT	CV-Sys 19.0v 38.0c 38.0c
1783 08/21/23 08:20:59 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1782 08/21/23 08:20:59 SYSTEM OUTPUT	CV-Sys Max O/T/B: 510w 293w 317w
1781 08/21/23 08:20:59 SYSTEM OUTPUT	CV-Sys Bot: 19.0v 10.1a 190w
1780 08/21/23 08:20:59 SYSTEM OUTPUT	CV-Sys Top: 19.0v 8.0a 151w
1779 08/21/23 08:20:59 SYSTEM OUTPUT	CV-Sys out: 52.6v 4.6a 242.3w
1778 08/21/23 08:05:59 SYSTEM RUNNING	CV-Sys
1777 08/21/23 08:05:56 START UP DATA	CV-Sys Top/Bot OCV: 22.81v 22.17v
1776 08/21/23 08:05:50 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1775 08/21/23 08:05:49 START UP DATA	CV-Sys Alarms: 0000000000000000
1774 08/21/23 08:05:49 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1773 08/21/23 08:05:49 START UP DATA	CV-Sys FID = CC:02.07.08
1772 08/21/23 08:05:49 START UP DATA	CV-Sys LVS= 48.0,2,52.5,26.1
1771 08/21/23 08:05:49 START UP DATA	CV-Sys 52.9v,1764p,2.99v,3.01v
1770 08/21/23 08:05:49 CONTACT START	CV-Sys Contact SN: PPS23249002
1769 08/21/23 07:58:29 RUN END DATA	CV-Sys Days To Next Exer: 18
1768 08/21/23 07:58:29 RUN END DATA	CV-Sys T: 0 0 22.5
1767 08/21/23 07:58:29 RUN END DATA	CV-Sys B: 0 0 22.9
1766 08/21/23 07:58:29 RUN END DATA	CV-Sys O: 0 0 # 38
1765 08/21/23 07:58:29 RUN END DATA	CV-Sys 11:30h 3.95kh 343.60w
1764 08/21/23 07:58:29 REMOTE STOP	FrDisp
1763 08/21/23 07:58:29 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1762 08/21/23 07:58:08 START UP DATA	CV-Sys Alarms: 0000000000000000
1761 08/21/23 07:58:08 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1760 08/21/23 07:58:08 START UP DATA	CV-Sys FID = CC:02.07.08
1759 08/21/23 07:58:08 START UP DATA	CV-Sys LVS= 48.0,2,52.5,25.5
1758 08/21/23 07:58:08 START UP DATA	CV-Sys 54.6v,1760p,2.98v,3.00v
1757 08/21/23 07:58:08 REMOTE START	FrDisp Remote SN: PPS23249002
1756 08/21/23 07:57:59 RUN END DATA	CV-Sys Days To Next Exer: 18
1755 08/21/23 07:57:59 RUN END DATA	CV-Sys T: 4 16 22.5
1754 08/21/23 07:57:59 RUN END DATA	CV-Sys B: 5 17 22.9
1753 08/21/23 07:57:59 RUN END DATA	CV-Sys O: 4 0 # 37
1752 08/21/23 07:57:59 RUN END DATA	CV-Sys 11:30h 3.95kh 343.60w
1751 08/21/23 07:57:59 REMOTE STOP	FrDisp

1750 08/21/23 07:52:42 SYSTEM OUTPUT	CV-Sys 22.8v 24.8c 25.0c R
1749 08/21/23 07:52:42 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1748 08/21/23 07:52:42 SYSTEM OUTPUT	CV-Sys Max O/T/B: 0w 15w 17w
1747 08/21/23 07:52:42 SYSTEM OUTPUT	CV-Sys Bot: 22.8v 0.0a 7w R
1746 08/21/23 07:52:42 SYSTEM OUTPUT	CV-Sys Top: 22.8v 0.1a 10w R
1745 08/21/23 07:52:41 SYSTEM OUTPUT	CV-Sys out: 54.4v 0.0a 0.0w R
1744 08/21/23 07:42:40 SYSTEM RUNNING	CV-Sys
1743 08/21/23 07:42:37 START UP DATA	CV-Sys Top/Bottom OCV: 22.24v 21.79v
1742 08/21/23 07:42:31 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1741 08/21/23 07:42:31 START UP DATA	CV-Sys Alarms: 0000000000000000
1740 08/21/23 07:42:31 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1739 08/21/23 07:42:31 START UP DATA	CV-Sys FID = CC:02.07.08
1738 08/21/23 07:42:31 START UP DATA	CV-Sys LVS= 48.0,2,52.5,31.4
1737 08/21/23 07:42:31 START UP DATA	CV-Sys 54.5v,1770p,3.01v,3.02v
1736 08/21/23 07:42:31 REMOTE START	WEB Remote SN: PPS23249002
1735 08/21/23 07:42:23 USER LOGGED IN	WEB ADMIN1
1734 08/21/23 07:42:13 USER LOGGED OUT	WEB ADMIN1
1733 08/21/23 07:42:11 USER LOGGED OUT	WEB ADMIN1
1732 08/21/23 07:34:21 RUN END DATA	CV-Sys Days To Next Exer: 18
1731 08/21/23 07:34:21 RUN END DATA	CV-Sys T: 246 360 17.6
1730 08/21/23 07:34:21 RUN END DATA	CV-Sys B: 271 380 17.6
1729 08/21/23 07:34:21 RUN END DATA	CV-Sys O: 427 625 # 36
1728 08/21/23 07:34:21 RUN END DATA	CV-Sys 11:20h 3.95kh 348.66w
1727 08/21/23 07:34:21 CONTACT STOP	CV-Sys
1726 08/21/23 07:34:21 SYSTEM OUTPUT	CV-Sys 18.7v 31.9c 39.5c
1725 08/21/23 07:34:21 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1724 08/21/23 07:34:21 SYSTEM OUTPUT	CV-Sys Max O/T/B: 636w 359w 380w
1723 08/21/23 07:34:21 SYSTEM OUTPUT	CV-Sys Bot: 18.8v 10.2a 196w
1722 08/21/23 07:34:21 SYSTEM OUTPUT	CV-Sys Top: 18.7v 9.6a 181w
1721 08/21/23 07:34:20 SYSTEM OUTPUT	CV-Sys out: 51.8v 5.9a 306.0w
1720 08/21/23 07:33:38 SYSTEM RUNNING	CV-Sys
1719 08/21/23 07:33:35 START UP DATA	CV-Sys Top/Bottom OCV: 22.37v 21.99v
1718 08/21/23 07:33:29 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1717 08/21/23 07:33:29 START UP DATA	CV-Sys Alarms: 0000000000000000
1716 08/21/23 07:33:29 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1715 08/21/23 07:33:29 START UP DATA	CV-Sys FID = CC:02.07.08
1714 08/21/23 07:33:29 START UP DATA	CV-Sys LVS= 48.0,2,52.5,29.8
1713 08/21/23 07:33:29 START UP DATA	CV-Sys 50.1v,1776p,3.00v,3.02v
1712 08/21/23 07:33:29 CONTACT START	CV-Sys Contact SN: PPS23249002
1711 08/21/23 07:26:01 NOTIFICATION OFF	CV-Sys Nt,LowH2 Detect, Lt 2.46
1710 08/21/23 07:25:59 NOTIFICATION ON	CV-Sys Nt,LowH2 Detect, Lt 2.44
1709 08/21/23 07:25:11 RUN END DATA	CV-Sys Days To Next Exer: 18
1708 08/21/23 07:25:11 RUN END DATA	CV-Sys T: 74 190 18.1
1707 08/21/23 07:25:11 RUN END DATA	CV-Sys B: 88 203 18.1
1706 08/21/23 07:25:11 RUN END DATA	CV-Sys O: 90 252 # 35
1705 08/21/23 07:25:11 RUN END DATA	CV-Sys 11:20h 3.95kh 348.58w
1704 08/21/23 07:25:11 CONTACT STOP	CV-Sys
1703 08/21/23 07:25:11 SYSTEM OUTPUT	CV-Sys 22.0v 29.7c 25.9c
1702 08/21/23 07:25:11 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1701 08/21/23 07:25:11 SYSTEM OUTPUT	CV-Sys Max O/T/B: 343w 189w 203w
1700 08/21/23 07:25:10 SYSTEM OUTPUT	CV-Sys Bot: 20.9v 2.3a 62w
1699 08/21/23 07:25:10 SYSTEM OUTPUT	CV-Sys Top: 20.9v 1.8a 43w
1698 08/21/23 07:25:10 SYSTEM OUTPUT	CV-Sys out: 52.9v 0.5a 26.1w

1697 08/21/23 07:24:40 SYSTEM RUNNING	CV-Sys
1696 08/21/23 07:24:37 START UP DATA	CV-Sys Top/Bot OCV: 23.01v 22.40v
1695 08/21/23 07:24:31 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1694 08/21/23 07:24:31 START UP DATA	CV-Sys Alarms: 0000000000000000
1693 08/21/23 07:24:31 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1692 08/21/23 07:24:31 START UP DATA	CV-Sys FID = CC:02.07.08
1691 08/21/23 07:24:31 START UP DATA	CV-Sys LVS= 48.0,2,52.5,29.5
1690 08/21/23 07:24:31 START UP DATA	CV-Sys 53.9v,1779p,3.00v,3.01v
1689 08/21/23 07:24:31 CONTACT START	CV-Sys Contact SN: PPS23249002
1688 08/21/23 07:17:55 RUN END DATA	CV-Sys Days To Next Exer: 18
1687 08/21/23 07:17:55 RUN END DATA	CV-Sys T: 79 186 16.4
1686 08/21/23 07:17:55 RUN END DATA	CV-Sys B: 87 180 16.4
1685 08/21/23 07:17:55 RUN END DATA	CV-Sys O: 71 263 # 34
1684 08/21/23 07:17:55 RUN END DATA	CV-Sys 11:19h 3.95kh 348.76w
1683 08/21/23 07:17:55 CONTACT STOP	CV-Sys
1682 08/21/23 07:17:55 SYSTEM OUTPUT	CV-Sys 20.7v 29.3c 27.9c
1681 08/21/23 07:17:55 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1680 08/21/23 07:17:55 SYSTEM OUTPUT	CV-Sys Max O/T/B: 297w 185w 179w
1679 08/21/23 07:17:55 SYSTEM OUTPUT	CV-Sys Bot: 20.5v 3.3a 67w
1678 08/21/23 07:17:54 SYSTEM OUTPUT	CV-Sys Top: 20.5v 2.8a 65w
1677 08/21/23 07:17:54 SYSTEM OUTPUT	CV-Sys out: 52.7v 0.5a 25.3w
1676 08/21/23 07:13:59 SYSTEM RUNNING	CV-Sys
1675 08/21/23 07:13:56 START UP DATA	CV-Sys Top/Bot OCV: 24.11v 23.84v
1674 08/21/23 07:13:51 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1673 08/21/23 07:13:50 START UP DATA	CV-Sys Alarms: 0000000000000000
1672 08/21/23 07:13:50 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1671 08/21/23 07:13:50 START UP DATA	CV-Sys FID = CC:02.07.08
1670 08/21/23 07:13:50 START UP DATA	CV-Sys LVS= 48.0,2,52.5,30.0
1669 08/21/23 07:13:50 START UP DATA	CV-Sys 53.8v,1790p,3.01v,3.03v
1668 08/21/23 07:13:50 CONTACT START	CV-Sys Contact SN: PPS23249002
1667 08/21/23 00:00:02 SYSTEM OUTPUT	CV-Sys Bot: 0.1v 0.7a 0w
1666 08/21/23 00:00:02 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.5a 0w
1665 08/21/23 00:00:01 DAILY TEMPS	CC-Sys CC: High = 32 , Low = 31
1664 08/20/23 00:00:02 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.6a 0w
1663 08/20/23 00:00:02 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.4a 0w
1662 08/20/23 00:00:01 DAILY TEMPS	CC-Sys CC: High = 33 , Low = 32
1661 08/19/23 00:00:02 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.6a 0w
1660 08/19/23 00:00:02 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.4a 0w
1659 08/19/23 00:00:01 DAILY TEMPS	CC-Sys CC: High = 33 , Low = 27
1658 08/18/23 13:28:02 SYSTEM OUTPUT	CV-Sys Bot: 0.1v 0.4a 0w
1657 08/18/23 13:28:02 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.1a 0w
1656 08/18/23 13:13:02 SYSTEM OUTPUT	CV-Sys Bot: 0.1v 0.5a 0w
1655 08/18/23 13:13:02 SYSTEM OUTPUT	CV-Sys Top: 0.3v 0.3a 0w
1654 08/18/23 12:58:02 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.4a 0w
1653 08/18/23 12:58:02 SYSTEM OUTPUT	CV-Sys Top: 1.1v 0.1a 0w
1652 08/18/23 12:43:02 SYSTEM OUTPUT	CV-Sys Bot: 1.9v 0.4a 0w
1651 08/18/23 12:43:02 SYSTEM OUTPUT	CV-Sys Top: 22.5v 0.2a 4w
1650 08/18/23 12:28:02 RUN END DATA	CV-Sys Days To Next Exer: 21
1649 08/18/23 12:28:02 RUN END DATA	CV-Sys T: 83 133 19.0
1648 08/18/23 12:28:02 RUN END DATA	CV-Sys B: 96 151 19.0
1647 08/18/23 12:28:02 RUN END DATA	CV-Sys O: 84 203 # 33
1646 08/18/23 12:28:02 RUN END DATA	CV-Sys 11:15h 3.94kh 350.44w
1645 08/18/23 12:28:02 CONTACT STOP	CV-Sys

1644 08/18/23 12:28:02 SYSTEM OUTPUT	CV-Sys 20.7v 29.8c 26.9c
1643 08/18/23 12:28:02 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1642 08/18/23 12:28:02 SYSTEM OUTPUT	CV-Sys Max O/T/B: 204w 132w 151w
1641 08/18/23 12:28:02 SYSTEM OUTPUT	CV-Sys Bot: 20.7v 3.0a 57w
1640 08/18/23 12:28:02 SYSTEM OUTPUT	CV-Sys Top: 20.7v 2.1a 47w
1639 08/18/23 12:28:01 SYSTEM OUTPUT	CV-Sys out: 52.7v 0.5a 25.5w
1638 08/18/23 12:21:32 SYSTEM OUTPUT	CV-Sys 20.2v 30.1c 25.0c R
1637 08/18/23 12:21:32 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1636 08/18/23 12:21:32 SYSTEM OUTPUT	CV-Sys Max O/T/B: 210w 142w 156w
1635 08/18/23 12:21:32 SYSTEM OUTPUT	CV-Sys Bot: 20.2v 4.1a 84w R
1634 08/18/23 12:21:32 SYSTEM OUTPUT	CV-Sys Top: 20.2v 3.5a 63w R
1633 08/18/23 12:21:31 SYSTEM OUTPUT	CV-Sys out: 52.7v 1.3a 69.6w R
1632 08/18/23 12:09:39 SYSTEM OUTPUT	CV-Sys 20.2v 30.0c 25.0c R
1631 08/18/23 12:09:39 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1630 08/18/23 12:09:39 SYSTEM OUTPUT	CV-Sys Max O/T/B: 339w 184w 207w
1629 08/18/23 12:09:39 SYSTEM OUTPUT	CV-Sys Bot: 20.3v 3.9a 72w R
1628 08/18/23 12:09:39 SYSTEM OUTPUT	CV-Sys Top: 20.3v 3.5a 68w R
1627 08/18/23 12:09:38 SYSTEM OUTPUT	CV-Sys out: 52.6v 1.3a 69.4w R
1626 08/18/23 11:59:27 SYSTEM RUNNING	CV-Sys
1625 08/18/23 11:59:24 START UP DATA	CV-Sys Top/Bot OCV: 23.08v 22.38v
1624 08/18/23 11:59:18 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1623 08/18/23 11:59:18 START UP DATA	CV-Sys Alarms: 0000000000000000
1622 08/18/23 11:59:18 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1621 08/18/23 11:59:18 START UP DATA	CV-Sys FID = CC:02.07.08
1620 08/18/23 11:59:18 START UP DATA	CV-Sys LVS= 48.0,2,52.5,30.0
1619 08/18/23 11:59:18 START UP DATA	CV-Sys 53.7v,1834p,2.91v,2.94v
1618 08/18/23 11:59:18 CONTACT START	CV-Sys Contact SN: PPS23249002
1617 08/18/23 11:50:29 RUN END DATA	CV-Sys Days To Next Exer: 21
1616 08/18/23 11:50:29 RUN END DATA	CV-Sys T: 84 142 19.0
1615 08/18/23 11:50:29 RUN END DATA	CV-Sys B: 95 155 19.1
1614 08/18/23 11:50:29 RUN END DATA	CV-Sys O: 82 211 # 32
1613 08/18/23 11:50:29 RUN END DATA	CV-Sys 10:49h 3.91kh 361.63w
1612 08/18/23 11:50:29 CONTACT STOP	CV-Sys
1611 08/18/23 11:50:29 SYSTEM OUTPUT	CV-Sys 20.8v 29.8c 27.2c
1610 08/18/23 11:50:29 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1609 08/18/23 11:50:29 SYSTEM OUTPUT	CV-Sys Max O/T/B: 215w 142w 154w
1608 08/18/23 11:50:29 SYSTEM OUTPUT	CV-Sys Bot: 20.8v 2.3a 58w
1607 08/18/23 11:50:29 SYSTEM OUTPUT	CV-Sys Top: 20.8v 2.3a 52w
1606 08/18/23 11:50:29 SYSTEM OUTPUT	CV-Sys out: 52.7v 0.4a 20.6w
1605 08/18/23 11:42:32 SYSTEM OUTPUT	CV-Sys 20.3v 29.9c 25.0c R
1604 08/18/23 11:42:32 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1603 08/18/23 11:42:32 SYSTEM OUTPUT	CV-Sys Max O/T/B: 262w 157w 170w
1602 08/18/23 11:42:32 SYSTEM OUTPUT	CV-Sys Bot: 20.3v 3.7a 75w R
1601 08/18/23 11:42:32 SYSTEM OUTPUT	CV-Sys Top: 20.3v 3.7a 73w R
1600 08/18/23 11:42:31 SYSTEM OUTPUT	CV-Sys out: 52.7v 1.3a 67.4w R
1599 08/18/23 11:32:22 SYSTEM RUNNING	CV-Sys
1598 08/18/23 11:32:19 START UP DATA	CV-Sys Top/Bot OCV: 22.91v 22.49v
1597 08/18/23 11:32:13 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1596 08/18/23 11:32:13 START UP DATA	CV-Sys Alarms: 0000000000000000
1595 08/18/23 11:32:13 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1594 08/18/23 11:32:13 START UP DATA	CV-Sys FID = CC:02.07.08
1593 08/18/23 11:32:13 START UP DATA	CV-Sys LVS= 48.0,2,52.5,27.8
1592 08/18/23 11:32:13 START UP DATA	CV-Sys 53.6v,1855p,2.88v,2.92v

1591 08/18/23 11:32:13	CONTACT START	CV-Sys Contact SN: PPS23249002
1590 08/18/23 11:26:22	RUN END DATA	CV-Sys Days To Next Exer: 21
1589 08/18/23 11:26:22	RUN END DATA	CV-Sys T: 46 76 20.6
1588 08/18/23 11:26:22	RUN END DATA	CV-Sys B: 56 82 20.6
1587 08/18/23 11:26:22	RUN END DATA	CV-Sys O: 18 31 # 31
1586 08/18/23 11:26:22	RUN END DATA	CV-Sys 10:31h 3.89kh 369.32w
1585 08/18/23 11:26:22	EXERCISE STOP	WEB
1584 08/18/23 11:26:22	SYSTEM OUTPUT	CV-Sys 20.9v 27.9c 26.8c
1583 08/18/23 11:26:22	SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1582 08/18/23 11:26:22	SYSTEM OUTPUT	CV-Sys Max O/T/B: 33w 75w 82w
1581 08/18/23 11:26:22	SYSTEM OUTPUT	CV-Sys Bot: 20.9v 2.7a 54w
1580 08/18/23 11:26:22	SYSTEM OUTPUT	CV-Sys Top: 21.0v 2.4a 48w
1579 08/18/23 11:26:22	SYSTEM OUTPUT	CV-Sys out: 54.9v 0.3a 18.2w
1578 08/18/23 11:17:25	SYSTEM EXERCISING	CV-Sys
1577 08/18/23 11:17:22	START UP DATA	CV-Sys Top/Bot OCV: 24.10v 23.90v
1576 08/18/23 11:17:16	SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1575 08/18/23 11:17:16	START UP DATA	CV-Sys Alarms: 0000000000000000
1574 08/18/23 11:17:16	START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1573 08/18/23 11:17:16	START UP DATA	CV-Sys FID = CC:02.07.08
1572 08/18/23 11:17:16	START UP DATA	CV-Sys LVS= 48.0,2,52.5,25.7
1571 08/18/23 11:17:16	START UP DATA	CV-Sys 54.3v,1867p,2.87v,2.91v
1570 08/18/23 11:17:16	EXERCISE START	WEB Exercise SN: PPS23249002
1569 08/18/23 11:16:54	EXERCISE DATE CHG	WEB User changed exercise day
1568 08/18/23 11:16:44	EXERCISE DATE CHG	WEB User changed exercise day
1567 08/18/23 11:16:07	TRIP TIME CLEARED	WEB
1566 08/18/23 11:16:07	TRIP TIME CLEARED	WEB
1565 08/18/23 11:16:06	TRIP TIME CLEARED	WEB
1564 08/18/23 11:16:03	TRIP TIME CLEARED	WEB
1563 08/18/23 11:15:26	EXERCISE TIME CHG	WEB
1562 08/18/23 11:15:15	EXERCISE DATE CHG	WEB User changed exercise day
1561 08/18/23 11:15:05	EXERCISE DATE CHG	WEB Reset due Exer Mode chg
1560 08/18/23 11:15:05	EXERCISE MODE CHG	WEB [AutoSchedule]
1559 08/18/23 11:14:54	USER LOGGED IN	WEB ADMIN1
1558 08/18/23 11:10:32	SYSTEM OUTPUT	CV-Sys Bot: 0.2v 1.4a 0w
1557 08/18/23 11:10:32	SYSTEM OUTPUT	CV-Sys Top: 0.2v 1.4a 0w
1556 08/18/23 11:10:31	EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
1555 06/14/23 13:17:42	EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
1554 06/14/23 13:17:42	CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48
1553 08/18/23 11:10:31	SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48
1552 08/18/23 11:10:30	EXERCISE DATE CHG	CC-Sys Date was bad, Tomorrow Set
1551 08/16/23 08:56:47	SYSTEM DE-ENERGIZED	CC-Sys
1550 08/16/23 08:55:29	RUN END DATA	CV-Sys Days To Next Exer: 1
1549 08/16/23 08:55:29	RUN END DATA	CV-Sys T: 84 143 18.9
1548 08/16/23 08:55:29	RUN END DATA	CV-Sys B: 99 162 19.0
1547 08/16/23 08:55:29	RUN END DATA	CV-Sys O: 78 210 # 30
1546 08/16/23 08:55:29	RUN END DATA	CV-Sys 10:23h 3.88kh 374.34w
1545 08/16/23 08:55:29	CONTACT STOP	CV-Sys
1544 08/16/23 08:55:29	SYSTEM OUTPUT	CV-Sys 20.6v 29.6c 27.7c
1543 08/16/23 08:55:29	SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1542 08/16/23 08:55:29	SYSTEM OUTPUT	CV-Sys Max O/T/B: 212w 142w 162w
1541 08/16/23 08:55:28	SYSTEM OUTPUT	CV-Sys Bot: 20.6v 3.0a 65w
1540 08/16/23 08:55:28	SYSTEM OUTPUT	CV-Sys Top: 20.6v 2.8a 65w
1539 08/16/23 08:55:28	SYSTEM OUTPUT	CV-Sys out: 52.7v 0.3a 13.9w

1538 08/16/23 08:50:20 SYSTEM OUTPUT	CV-Sys 20.2v 29.3c 25.0c R
1537 08/16/23 08:50:20 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1536 08/16/23 08:50:20 SYSTEM OUTPUT	CV-Sys Max O/T/B: 214w 142w 161w
1535 08/16/23 08:50:20 SYSTEM OUTPUT	CV-Sys Bot: 20.2v 4.7a 93w R
1534 08/16/23 08:50:19 SYSTEM OUTPUT	CV-Sys Top: 20.2v 3.5a 74w R
1533 08/16/23 08:50:19 SYSTEM OUTPUT	CV-Sys out: 52.7v 1.0a 55.3w R
1532 08/16/23 08:38:19 SYSTEM OUTPUT	CV-Sys 20.1v 29.7c 25.0c R
1531 08/16/23 08:38:19 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1530 08/16/23 08:38:19 SYSTEM OUTPUT	CV-Sys Max O/T/B: 204w 138w 158w
1529 08/16/23 08:38:19 SYSTEM OUTPUT	CV-Sys Bot: 20.1v 5.1a 101w R
1528 08/16/23 08:38:18 SYSTEM OUTPUT	CV-Sys Top: 20.1v 3.8a 79w R
1527 08/16/23 08:38:18 SYSTEM OUTPUT	CV-Sys out: 52.7v 1.1a 57.1w R
1526 08/16/23 08:26:18 SYSTEM OUTPUT	CV-Sys 20.1v 29.5c 25.0c R
1525 08/16/23 08:26:18 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1524 08/16/23 08:26:18 SYSTEM OUTPUT	CV-Sys Max O/T/B: 219w 149w 169w
1523 08/16/23 08:26:18 SYSTEM OUTPUT	CV-Sys Bot: 20.1v 5.2a 109w R
1522 08/16/23 08:26:18 SYSTEM OUTPUT	CV-Sys Top: 20.1v 4.1a 89w R
1521 08/16/23 08:26:17 SYSTEM OUTPUT	CV-Sys out: 52.7v 1.2a 65.5w R
1520 08/16/23 08:14:14 SYSTEM OUTPUT	CV-Sys 20.3v 30.0c 25.0c R
1519 08/16/23 08:14:14 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1518 08/16/23 08:14:14 SYSTEM OUTPUT	CV-Sys Max O/T/B: 219w 148w 165w
1517 08/16/23 08:14:14 SYSTEM OUTPUT	CV-Sys Bot: 20.3v 4.3a 86w R
1516 08/16/23 08:14:13 SYSTEM OUTPUT	CV-Sys Top: 20.3v 3.3a 63w R
1515 08/16/23 08:14:13 SYSTEM OUTPUT	CV-Sys out: 52.6v 1.1a 59.3w R
1514 08/16/23 08:02:12 SYSTEM OUTPUT	CV-Sys 20.2v 29.4c 25.0c R
1513 08/16/23 08:02:12 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1512 08/16/23 08:02:12 SYSTEM OUTPUT	CV-Sys Max O/T/B: 219w 146w 162w
1511 08/16/23 08:02:12 SYSTEM OUTPUT	CV-Sys Bot: 20.2v 4.7a 91w R
1510 08/16/23 08:02:11 SYSTEM OUTPUT	CV-Sys Top: 20.3v 3.5a 77w R
1509 08/16/23 08:02:11 SYSTEM OUTPUT	CV-Sys out: 52.7v 1.1a 55.6w R
1508 08/16/23 07:50:07 SYSTEM OUTPUT	CV-Sys 20.1v 29.4c 30.9c R
1507 08/16/23 07:50:07 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1506 08/16/23 07:50:07 SYSTEM OUTPUT	CV-Sys Max O/T/B: 73w 108w 118w
1505 08/16/23 07:50:07 SYSTEM OUTPUT	CV-Sys Bot: 20.1v 5.1a 103w R
1504 08/16/23 07:50:07 SYSTEM OUTPUT	CV-Sys Top: 20.1v 3.8a 82w R
1503 08/16/23 07:50:07 SYSTEM OUTPUT	CV-Sys out: 52.7v 1.0a 53.8w R
1502 08/16/23 07:37:14 SYSTEM RUNNING	CV-Sys
1501 08/16/23 07:37:11 START UP DATA	CV-Sys Top/Bot OCV: 22.28v 21.93v
1500 08/16/23 07:37:05 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1499 08/16/23 07:37:05 START UP DATA	CV-Sys Alarms: 0000000000000000
1498 08/16/23 07:37:05 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1497 08/16/23 07:37:05 START UP DATA	CV-Sys FID = CC:02.07.08
1496 08/16/23 07:37:05 START UP DATA	CV-Sys LVS= 48.0,2,52.5,27.0
1495 08/16/23 07:37:05 START UP DATA	CV-Sys 54.1v,1878p,2.88v,2.91v
1494 08/16/23 07:37:05 CONTACT START	CV-Sys Contact SN: PPS23249002
1493 08/16/23 07:36:54 USER LOGGED IN	WEB ADMIN1
1492 08/16/23 07:36:40 USER LOGGED OUT	WEB ADMIN1
1491 08/16/23 07:27:59 RUN END DATA	CV-Sys Days To Next Exer: 1
1490 08/16/23 07:27:59 RUN END DATA	CV-Sys T: 81 103 19.9
1489 08/16/23 07:27:59 RUN END DATA	CV-Sys B: 93 118 20.1
1488 08/16/23 07:27:59 RUN END DATA	CV-Sys O: 53 68 # 29
1487 08/16/23 07:27:59 RUN END DATA	CV-Sys 9:11h 3.80kh 414.23w
1486 08/16/23 07:27:59 CONTACT STOP	CV-Sys

1485 08/16/23 07:27:59 SYSTEM OUTPUT	CV-Sys 20.5v 27.3c 28.8c
1484 08/16/23 07:27:59 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1483 08/16/23 07:27:59 SYSTEM OUTPUT	CV-Sys Max O/T/B: 69w 102w 117w
1482 08/16/23 07:27:59 SYSTEM OUTPUT	CV-Sys Bot: 20.5v 3.2a 70w
1481 08/16/23 07:27:59 SYSTEM OUTPUT	CV-Sys Top: 20.5v 3.7a 72w
1480 08/16/23 07:27:59 SYSTEM OUTPUT	CV-Sys out: 52.7v 0.3a 13.3w
1479 08/16/23 07:23:17 SYSTEM RUNNING	CV-Sys
1478 08/16/23 07:23:14 START UP DATA	CV-Sys Top/Bottom OCV: 21.17v 20.28v
1477 08/16/23 07:23:11 NOTIFICATION OFF	CV-Sys Nt,LowH2 Detect, Rt 2.48
1476 08/16/23 07:23:11 NOTIFICATION OFF	CV-Sys Nt,LowH2 Detect, Lt 2.47
1475 08/16/23 07:23:08 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1474 08/16/23 07:23:08 START UP DATA	CV-Sys Alarms: 0000000000000000
1473 08/16/23 07:23:08 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1472 08/16/23 07:23:08 START UP DATA	CV-Sys FID = CC:02.07.08
1471 08/16/23 07:23:08 START UP DATA	CV-Sys LVS= 48.0,2,52.5,23.1
1470 08/16/23 07:23:08 START UP DATA	CV-Sys 53.9v,1876p,2.39v,2.35v
1469 08/16/23 07:23:08 CONTACT START	CV-Sys Contact SN: PPS23249002
1468 08/16/23 07:23:02 NOTIFICATION ON	CV-Sys Nt,LowH2 Detect, Rt 2.32
1467 08/16/23 07:22:54 NOTIFICATION ON	CV-Sys Nt,LowH2 Detect, Lt 2.31
1466 08/16/23 07:22:32 ALARM OFF	CV-Sys Mj,Rt H2 SensorLeak
1465 08/16/23 07:22:24 ALARM OFF	CV-Sys Mj,Lt H2 SensorLeak
1464 08/16/23 07:20:45 ALARM ON	CV-Sys Mj,Rt H2 SensorLeak
1463 08/16/23 07:20:42 ALARM ON	CV-Sys Mj,Lt H2 SensorLeak
1462 08/16/23 07:20:39 ALARM OFF	CV-Sys Mj,Rt H2 SensorLeak
1461 08/16/23 07:20:38 ALARM ON	CV-Sys Mj,Rt H2 SensorLeak
1460 08/16/23 07:20:30 RUN END DATA	CV-Sys Days To Next Exer: 1
1459 08/16/23 07:20:30 RUN END DATA	CV-Sys T: 9 17 21.6
1458 08/16/23 07:20:30 RUN END DATA	CV-Sys B: 11 18 21.6
1457 08/16/23 07:20:30 RUN END DATA	CV-Sys O: 81 0 # 28
1456 08/16/23 07:20:30 RUN END DATA	CV-Sys 9:07h 3.80kh 417.35w
1455 08/16/23 07:20:30 CONTACT STOP	CV-Sys
1454 08/16/23 07:20:30 SYSTEM OUTPUT	CV-Sys 21.6v 22.4c 25.0c
1453 08/16/23 07:20:30 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1452 08/16/23 07:20:30 SYSTEM OUTPUT	CV-Sys Max O/T/B: 0w 18w 21w
1451 08/16/23 07:20:30 SYSTEM OUTPUT	CV-Sys Bot: 21.6v 0.6a 13w
1450 08/16/23 07:20:30 SYSTEM OUTPUT	CV-Sys Top: 21.6v 0.5a 9w
1449 08/16/23 07:20:30 SYSTEM OUTPUT	CV-Sys out: 55.1v 0.0a 0.0w
1448 08/16/23 07:20:09 SYSTEM RUNNING	CV-Sys
1447 08/16/23 07:20:06 START UP DATA	CV-Sys Top/Bottom OCV: 24.24v 23.98v
1446 08/16/23 07:20:00 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1445 08/16/23 07:20:00 START UP DATA	CV-Sys Alarms: 0000000000000000
1444 08/16/23 07:20:00 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1443 08/16/23 07:20:00 START UP DATA	CV-Sys FID = CC:02.07.08
1442 08/16/23 07:20:00 START UP DATA	CV-Sys LVS= 48.0,2,52.5,22.6
1441 08/16/23 07:20:00 START UP DATA	CV-Sys 51.2v,1875p,2.81v,2.85v
1440 08/16/23 07:20:00 CONTACT START	CV-Sys Contact SN: PPS23249002
1439 08/16/23 07:19:32 USER LOGGED IN	WEB ADMIN1
1438 08/16/23 07:19:14 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 1.9a 0w
1437 08/16/23 07:19:14 SYSTEM OUTPUT	CV-Sys Top: 0.2v 1.6a 0w
1436 08/16/23 07:19:13 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
1435 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
1434 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48
1433 08/16/23 07:19:13 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48

1432 08/16/23 07:19:13 EXERCISE DATE CHG	CC-Sys Date was bad, Tomorrow Set
1431 08/09/23 15:30:19 SYSTEM DE-ENERGIZED	CC-Sys
1430 08/09/23 15:29:51 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 1.3a 0w
1429 08/09/23 15:29:51 SYSTEM OUTPUT	CV-Sys Top: 0.2v 1.1a 0w
1428 08/09/23 15:29:50 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
1427 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
1426 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48
1425 08/09/23 15:29:50 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48
1424 08/08/23 11:30:11 SYSTEM DE-ENERGIZED	CC-Sys
1423 08/08/23 11:24:13 RUN END DATA	CV-Sys Days To Next Exer: 21
1422 08/08/23 11:24:13 RUN END DATA	CV-Sys T: 174 282 17.6
1421 08/08/23 11:24:13 RUN END DATA	CV-Sys B: 192 302 17.8
1420 08/08/23 11:24:13 RUN END DATA	CV-Sys O: 254 491 # 27
1419 08/08/23 11:24:13 RUN END DATA	CV-Sys 9:06h 3.80kh 417.62w
1418 08/08/23 11:24:13 CONTACT STOP	CV-Sys
1417 08/08/23 11:24:12 SYSTEM OUTPUT	CV-Sys 20.5v 36.3c 29.4c
1416 08/08/23 11:24:12 SYSTEM OUTPUT	CV-Sys Min O/T/B: 45w 74w 81w
1415 08/08/23 11:24:12 SYSTEM OUTPUT	CV-Sys Max O/T/B: 328w 227w 250w
1414 08/08/23 11:24:12 SYSTEM OUTPUT	CV-Sys Bot: 20.5v 3.5a 81w
1413 08/08/23 11:24:12 SYSTEM OUTPUT	CV-Sys Top: 20.5v 3.5a 74w
1412 08/08/23 11:24:12 SYSTEM OUTPUT	CV-Sys out: 52.6v 1.0a 52.0w
1411 08/08/23 11:19:20 SYSTEM OUTPUT	CV-Sys 19.3v 36.6c 38.8c
1410 08/08/23 11:19:20 SYSTEM OUTPUT	CV-Sys Min O/T/B: 183w 118w 137w
1409 08/08/23 11:19:20 SYSTEM OUTPUT	CV-Sys Max O/T/B: 331w 229w 247w
1408 08/08/23 11:19:20 SYSTEM OUTPUT	CV-Sys Bot: 19.3v 9.8a 188w
1407 08/08/23 11:19:20 SYSTEM OUTPUT	CV-Sys Top: 19.3v 9.4a 182w
1406 08/08/23 11:19:20 SYSTEM OUTPUT	CV-Sys out: 52.5v 5.4a 282.4w
1405 08/08/23 11:04:20 SYSTEM OUTPUT	CV-Sys 19.2v 36.1c 40.0c
1404 08/08/23 11:04:20 SYSTEM OUTPUT	CV-Sys Min O/T/B: 180w 121w 138w
1403 08/08/23 11:04:20 SYSTEM OUTPUT	CV-Sys Max O/T/B: 328w 225w 251w
1402 08/08/23 11:04:20 SYSTEM OUTPUT	CV-Sys Bot: 19.2v 10.6a 204w
1401 08/08/23 11:04:20 SYSTEM OUTPUT	CV-Sys Top: 19.2v 10.4a 199w
1400 08/08/23 11:04:20 SYSTEM OUTPUT	CV-Sys out: 52.5v 5.6a 292.9w
1399 08/08/23 10:49:20 SYSTEM OUTPUT	CV-Sys 19.3v 36.3c 38.4c
1398 08/08/23 10:49:20 SYSTEM OUTPUT	CV-Sys Min O/T/B: 183w 122w 136w
1397 08/08/23 10:49:20 SYSTEM OUTPUT	CV-Sys Max O/T/B: 335w 224w 252w
1396 08/08/23 10:49:20 SYSTEM OUTPUT	CV-Sys Bot: 19.3v 9.9a 191w
1395 08/08/23 10:49:20 SYSTEM OUTPUT	CV-Sys Top: 19.3v 8.7a 167w
1394 08/08/23 10:49:20 SYSTEM OUTPUT	CV-Sys out: 52.6v 5.0a 260.6w
1393 08/08/23 10:34:20 SYSTEM OUTPUT	CV-Sys 19.1v 36.1c 39.0c
1392 08/08/23 10:34:20 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1391 08/08/23 10:34:20 SYSTEM OUTPUT	CV-Sys Max O/T/B: 521w 281w 302w
1390 08/08/23 10:34:20 SYSTEM OUTPUT	CV-Sys Bot: 19.1v 10.7a 204w
1389 08/08/23 10:34:20 SYSTEM OUTPUT	CV-Sys Top: 19.1v 8.8a 168w
1388 08/08/23 10:34:20 SYSTEM OUTPUT	CV-Sys out: 52.6v 5.1a 266.7w
1387 08/08/23 10:19:20 SYSTEM RUNNING	CV-Sys
1386 08/08/23 10:19:17 START UP DATA	CV-Sys Top/Bot OCV: 22.77v 22.34v
1385 08/08/23 10:19:11 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1384 08/08/23 10:19:11 START UP DATA	CV-Sys Alarms: 0000000000000000
1383 08/08/23 10:19:11 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1382 08/08/23 10:19:11 START UP DATA	CV-Sys FID = CC:02.07.08
1381 08/08/23 10:19:11 START UP DATA	CV-Sys LVS= 48.0,2,52.5,34.9
1380 08/08/23 10:19:11 START UP DATA	CV-Sys 52.7v,1837p,2.91v,2.96v

1379 08/08/23 10:19:11 CONTACT START	CV-Sys Contact SN: PPS23249002
1378 08/08/23 10:13:26 ALARM OFF	CV-Sys MJ,Rt H2 SensorLeak
1377 08/08/23 10:13:21 ALARM ON	CV-Sys MJ,Rt H2 SensorLeak
1376 08/08/23 10:13:08 RUN END DATA	CV-Sys Days To Next Exer: 21
1375 08/08/23 10:13:08 RUN END DATA	CV-Sys T: 175 231 19.5
1374 08/08/23 10:13:08 RUN END DATA	CV-Sys B: 189 250 19.3
1373 08/08/23 10:13:08 RUN END DATA	CV-Sys O: 250 332 # 26
1372 08/08/23 10:13:08 RUN END DATA	CV-Sys 8:01h 3.53kh 439.60w
1371 08/08/23 10:13:08 CONTACT STOP	CV-Sys
1370 08/08/23 10:13:08 SYSTEM OUTPUT	CV-Sys 20.7v 36.4c 29.1c
1369 08/08/23 10:13:08 SYSTEM OUTPUT	CV-Sys Min O/T/B: 50w 65w 83w
1368 08/08/23 10:13:08 SYSTEM OUTPUT	CV-Sys Max O/T/B: 323w 225w 241w
1367 08/08/23 10:13:08 SYSTEM OUTPUT	CV-Sys Bot: 20.5v 4.1a 83w
1366 08/08/23 10:13:08 SYSTEM OUTPUT	CV-Sys Top: 20.5v 3.2a 65w
1365 08/08/23 10:13:08 SYSTEM OUTPUT	CV-Sys out: 52.6v 1.3a 70.1w
1364 08/08/23 10:10:02 SYSTEM OUTPUT	CV-Sys 19.1v 36.0c 38.8c
1363 08/08/23 10:10:02 SYSTEM OUTPUT	CV-Sys Min O/T/B: 180w 127w 135w
1362 08/08/23 10:10:02 SYSTEM OUTPUT	CV-Sys Max O/T/B: 331w 231w 249w
1361 08/08/23 10:10:02 SYSTEM OUTPUT	CV-Sys Bot: 19.1v 10.2a 194w
1360 08/08/23 10:10:02 SYSTEM OUTPUT	CV-Sys Top: 19.1v 9.0a 171w
1359 08/08/23 10:10:02 SYSTEM OUTPUT	CV-Sys out: 52.5v 4.8a 253.9w
1358 08/08/23 09:55:02 SYSTEM OUTPUT	CV-Sys 19.2v 36.2c 38.4c
1357 08/08/23 09:55:02 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1356 08/08/23 09:55:02 SYSTEM OUTPUT	CV-Sys Max O/T/B: 332w 228w 249w
1355 08/08/23 09:55:02 SYSTEM OUTPUT	CV-Sys Bot: 19.2v 10.2a 195w
1354 08/08/23 09:55:02 SYSTEM OUTPUT	CV-Sys Top: 19.1v 8.4a 161w
1353 08/08/23 09:55:02 SYSTEM OUTPUT	CV-Sys out: 52.6v 4.7a 247.4w
1352 08/08/23 09:39:04 SYSTEM OUTPUT	CV-Sys 20.1v 28.5c 25.0c R
1351 08/08/23 09:39:04 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1350 08/08/23 09:39:04 SYSTEM OUTPUT	CV-Sys Max O/T/B: 357w 186w 191w
1349 08/08/23 09:39:04 SYSTEM OUTPUT	CV-Sys Bot: 20.2v 4.2a 83w R
1348 08/08/23 09:39:04 SYSTEM OUTPUT	CV-Sys Top: 20.2v 4.1a 80w R
1347 08/08/23 09:39:03 SYSTEM OUTPUT	CV-Sys out: 52.7v 1.4a 73.0w R
1346 08/08/23 09:29:32 EXERCISE TIME CHG	WEB
1345 08/08/23 09:29:27 EXERCISE DATE CHG	WEB User changed exercise day
1344 08/08/23 09:29:19 EXERCISE DATE CHG	WEB Reset due Exer Mode chg
1343 08/08/23 09:29:19 EXERCISE MODE CHG	WEB [AutoSchedule]
1342 08/08/23 09:28:51 SYSTEM RUNNING	CV-Sys
1341 08/08/23 09:28:48 START UP DATA	CV-Sys Top/Bot OCV: 22.92v 22.46v
1340 08/08/23 09:28:42 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1339 08/08/23 09:28:42 START UP DATA	CV-Sys Alarms: 0000000000000000
1338 08/08/23 09:28:42 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1337 08/08/23 09:28:42 START UP DATA	CV-Sys FID = CC:02.07.08
1336 08/08/23 09:28:42 START UP DATA	CV-Sys LVS= 48.0,2,52.5,28.2
1335 08/08/23 09:28:42 START UP DATA	CV-Sys 53.8v,1912p,2.87v,2.91v
1334 08/08/23 09:28:42 CONTACT START	CV-Sys Contact SN: PPS23249002
1333 08/08/23 09:23:19 LOW VOLT START CHG	WEB Setting = 48.0
1332 08/08/23 09:23:20 RUN END DATA	CV-Sys Days To Next Exer: 1
1331 08/08/23 09:23:20 RUN END DATA	CV-Sys T: 87 167 16.2
1330 08/08/23 09:23:20 RUN END DATA	CV-Sys B: 98 181 18.9
1329 08/08/23 09:23:20 RUN END DATA	CV-Sys O: 75 240 # 25
1328 08/08/23 09:23:20 RUN END DATA	CV-Sys 7:18h 3.37kh 462.35w
1327 08/08/23 09:23:20 CONTACT STOP	CV-Sys

1326 08/08/23 09:23:20 SYSTEM OUTPUT	CV-Sys 20.5v 28.5c 28.4c
1325 08/08/23 09:23:20 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1324 08/08/23 09:23:20 SYSTEM OUTPUT	CV-Sys Max O/T/B: 263w 167w 181w
1323 08/08/23 09:23:19 SYSTEM OUTPUT	CV-Sys Bot: 20.4v 3.4a 68w
1322 08/08/23 09:23:19 SYSTEM OUTPUT	CV-Sys Top: 20.4v 3.3a 70w
1321 08/08/23 09:23:19 SYSTEM OUTPUT	CV-Sys out: 52.6v 0.5a 28.5w
1320 08/08/23 09:22:30 TIME CHG	WEB
1319 08/08/23 09:18:57 USER LOGGED IN	WEB ADMIN1
1318 08/08/23 09:15:10 SYSTEM RUNNING	CV-Sys
1317 08/08/23 09:15:07 START UP DATA	CV-Sys Top/Bot OCV: 24.26v 23.96v
1316 08/08/23 09:15:01 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1315 08/08/23 09:14:48 START UP DATA	CV-Sys Alarms: 0000000000000000
1314 08/08/23 09:14:48 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1313 08/08/23 09:14:48 START UP DATA	CV-Sys FID = CC:02.07.08
1312 08/08/23 09:14:48 START UP DATA	CV-Sys LVS= 47.9,2,52.5,24.3
1311 08/08/23 09:14:48 START UP DATA	CV-Sys 53.1v,1924p,2.64v,2.64v
1310 08/08/23 09:14:48 CONTACT START	CV-Sys Contact SN: PPS23249002
1309 08/08/23 09:14:36 SYSTEM OUTPUT	CV-Sys Bot: 0.1v 1.7a 0w
1308 08/08/23 09:14:36 SYSTEM OUTPUT	CV-Sys Top: 0.2v 1.5a 0w
1307 08/08/23 09:14:35 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
1306 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
1305 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48
1304 08/08/23 09:14:35 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48
1303 08/08/23 09:14:35 EXERCISE DATE CHG	CC-Sys Date was bad, Tomorrow Set
1302 08/01/23 10:04:40 SYSTEM DE-ENERGIZED	CC-Sys
1301 08/01/23 10:02:55 RUN END DATA	CV-Sys Days To Next Exer: 1
1300 08/01/23 10:02:55 RUN END DATA	CV-Sys T: 71 143 19.1
1299 08/01/23 10:02:55 RUN END DATA	CV-Sys B: 92 162 19.1
1298 08/01/23 10:02:55 RUN END DATA	CV-Sys O: 98 228 # 24
1297 08/01/23 10:02:55 RUN END DATA	CV-Sys 7:12h 3.37kh 467.61w
1296 08/01/23 10:02:55 CONTACT STOP	CV-Sys
1295 08/01/23 10:02:55 SYSTEM OUTPUT	CV-Sys 21.1v 34.3c 26.1c
1294 08/01/23 10:02:55 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1293 08/01/23 10:02:55 SYSTEM OUTPUT	CV-Sys Max O/T/B: 234w 142w 161w
1292 08/01/23 10:02:55 SYSTEM OUTPUT	CV-Sys Bot: 21.1v 2.0a 58w
1291 08/01/23 10:02:55 SYSTEM OUTPUT	CV-Sys Top: 20.8v 1.5a 30w
1290 08/01/23 10:02:54 SYSTEM OUTPUT	CV-Sys out: 52.9v 0.6a 32.0w
1289 08/01/23 10:02:33 SYSTEM RUNNING	CV-Sys
1288 08/01/23 10:02:30 START UP DATA	CV-Sys Top/Bot OCV: 21.54v 21.34v
1287 08/01/23 10:02:25 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1286 08/01/23 10:02:21 START UP DATA	CV-Sys Alarms: 0000000000000000
1285 08/01/23 10:02:21 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1284 08/01/23 10:02:21 START UP DATA	CV-Sys FID = CC:02.07.08
1283 08/01/23 10:02:21 START UP DATA	CV-Sys LVS= 47.9,2,52.5,35.7
1282 08/01/23 10:02:21 START UP DATA	CV-Sys 54.2v,1921p,2.55v,2.51v
1281 08/01/23 10:02:21 CONTACT START	CV-Sys Contact SN: PPS23249002
1280 08/01/23 10:01:54 RUN END DATA	CV-Sys Days To Next Exer: 1
1279 08/01/23 10:01:54 RUN END DATA	CV-Sys T: 176 271 18.4
1278 08/01/23 10:01:54 RUN END DATA	CV-Sys B: 190 303 17.5
1277 08/01/23 10:01:54 RUN END DATA	CV-Sys O: 252 435 # 23
1276 08/01/23 10:01:54 RUN END DATA	CV-Sys 7:12h 3.37kh 467.87w
1275 08/01/23 10:01:54 CONTACT STOP	CV-Sys
1274 08/01/23 10:01:54 SYSTEM OUTPUT	CV-Sys 20.7v 35.6c 27.8c

1273 08/01/23 10:01:54 SYSTEM OUTPUT	CV-Sys Min O/T/B: 28w 52w 71w
1272 08/01/23 10:01:54 SYSTEM OUTPUT	CV-Sys Max O/T/B: 326w 223w 246w
1271 08/01/23 10:01:54 SYSTEM OUTPUT	CV-Sys Bot: 20.7v 3.6a 71w
1270 08/01/23 10:01:54 SYSTEM OUTPUT	CV-Sys Top: 20.7v 2.7a 52w
1269 08/01/23 10:01:54 SYSTEM OUTPUT	CV-Sys out: 52.6v 0.6a 31.5w
1268 08/01/23 09:58:50 USER LOGGED IN	WEB ADMIN1
1267 08/01/23 09:58:40 USER LOGGED OUT	WEB ADMIN1
1266 08/01/23 09:58:36 USER LOGGED OUT	WEB ADMIN1
1265 08/01/23 09:58:08 SYSTEM OUTPUT	CV-Sys 19.4v 35.8c 35.8c
1264 08/01/23 09:58:08 SYSTEM OUTPUT	CV-Sys Min O/T/B: 181w 121w 131w
1263 08/01/23 09:58:08 SYSTEM OUTPUT	CV-Sys Max O/T/B: 332w 227w 250w
1262 08/01/23 09:58:08 SYSTEM OUTPUT	CV-Sys Bot: 19.4v 8.2a 159w
1261 08/01/23 09:58:08 SYSTEM OUTPUT	CV-Sys Top: 19.4v 6.9a 133w
1260 08/01/23 09:58:08 SYSTEM OUTPUT	CV-Sys out: 52.7v 3.7a 192.7w
1259 08/01/23 09:43:08 SYSTEM OUTPUT	CV-Sys 19.3v 35.9c 35.8c
1258 08/01/23 09:43:08 SYSTEM OUTPUT	CV-Sys Min O/T/B: 177w 126w 135w
1257 08/01/23 09:43:08 SYSTEM OUTPUT	CV-Sys Max O/T/B: 329w 228w 249w
1256 08/01/23 09:43:08 SYSTEM OUTPUT	CV-Sys Bot: 19.3v 8.4a 162w
1255 08/01/23 09:43:08 SYSTEM OUTPUT	CV-Sys Top: 19.3v 6.7a 129w
1254 08/01/23 09:43:08 SYSTEM OUTPUT	CV-Sys out: 52.6v 3.6a 191.8w
1253 08/01/23 09:28:08 SYSTEM OUTPUT	CV-Sys 19.3v 35.7c 37.5c
1252 08/01/23 09:28:08 SYSTEM OUTPUT	CV-Sys Min O/T/B: 180w 125w 133w
1251 08/01/23 09:28:08 SYSTEM OUTPUT	CV-Sys Max O/T/B: 333w 231w 250w
1250 08/01/23 09:28:08 SYSTEM OUTPUT	CV-Sys Bot: 19.3v 8.7a 167w
1249 08/01/23 09:28:08 SYSTEM OUTPUT	CV-Sys Top: 19.3v 8.7a 167w
1248 08/01/23 09:28:08 SYSTEM OUTPUT	CV-Sys out: 52.7v 3.6a 189.8w
1247 08/01/23 09:13:08 SYSTEM OUTPUT	CV-Sys 19.4v 35.8c 37.4c
1246 08/01/23 09:13:08 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1245 08/01/23 09:13:08 SYSTEM OUTPUT	CV-Sys Max O/T/B: 445w 270w 303w
1244 08/01/23 09:13:08 SYSTEM OUTPUT	CV-Sys Bot: 19.4v 8.5a 164w
1243 08/01/23 09:13:08 SYSTEM OUTPUT	CV-Sys Top: 19.4v 8.8a 170w
1242 08/01/23 09:13:08 SYSTEM OUTPUT	CV-Sys out: 52.7v 3.9a 203.9w
1241 08/01/23 08:58:08 SYSTEM RUNNING	CV-Sys
1240 08/01/23 08:58:05 START UP DATA	CV-Sys Top/Bot OCV: 24.26v 23.96v
1239 08/01/23 08:57:59 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1238 08/01/23 08:57:58 START UP DATA	CV-Sys Alarms: 0000000000000000
1237 08/01/23 08:57:58 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1236 08/01/23 08:57:58 START UP DATA	CV-Sys FID = CC:02.07.08
1235 08/01/23 08:57:58 START UP DATA	CV-Sys LVS= 47.9,2,52.5,23.2
1234 08/01/23 08:57:58 START UP DATA	CV-Sys 52.8v,1938p,2.85v,2.88v
1233 08/01/23 08:57:58 CONTACT START	CV-Sys Contact SN: PPS23249002
1232 08/01/23 08:57:50 USER LOGGED IN	WEB ADMIN1
1231 08/01/23 08:56:17 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 1.2a 0w
1230 08/01/23 08:56:17 SYSTEM OUTPUT	CV-Sys Top: 0.2v 1.0a 0w
1229 08/01/23 08:56:16 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
1228 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
1227 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48
1226 08/01/23 08:56:16 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48
1225 08/01/23 08:56:15 EXERCISE DATE CHG	CC-Sys Date was bad, Tomorrow Set
1224 07/27/23 13:35:14 SYSTEM DE-ENERGIZED	CC-Sys
1223 07/27/23 13:33:52 RUN END DATA	CV-Sys Days To Next Exer: 1
1222 07/27/23 13:33:52 RUN END DATA	CV-Sys T: 173 238 19.1
1221 07/27/23 13:33:52 RUN END DATA	CV-Sys B: 192 343 18.4

1220 07/27/23 13:33:52 RUN END DATA	CV-Sys O: 253 425 # 22
1219 07/27/23 13:33:52 RUN END DATA	CV-Sys 6:08h 3.10kh 505.19w
1218 07/27/23 13:33:52 CONTACT STOP	CV-Sys
1217 07/27/23 13:33:52 SYSTEM OUTPUT	CV-Sys 20.6v 36.5c 28.6c
1216 07/27/23 13:33:52 SYSTEM OUTPUT	CV-Sys Min O/T/B: 53w 69w 70w
1215 07/27/23 13:33:52 SYSTEM OUTPUT	CV-Sys Max O/T/B: 329w 228w 252w
1214 07/27/23 13:33:52 SYSTEM OUTPUT	CV-Sys Bot: 20.5v 3.6a 70w
1213 07/27/23 13:33:52 SYSTEM OUTPUT	CV-Sys Top: 20.5v 3.6a 69w
1212 07/27/23 13:33:51 SYSTEM OUTPUT	CV-Sys out: 52.7v 1.3a 70.7w
1211 07/27/23 13:27:52 SYSTEM OUTPUT	CV-Sys 19.2v 36.6c 36.5c
1210 07/27/23 13:27:52 SYSTEM OUTPUT	CV-Sys Min O/T/B: 182w 120w 136w
1209 07/27/23 13:27:52 SYSTEM OUTPUT	CV-Sys Max O/T/B: 329w 225w 253w
1208 07/27/23 13:27:52 SYSTEM OUTPUT	CV-Sys Bot: 19.2v 8.7a 167w
1207 07/27/23 13:27:52 SYSTEM OUTPUT	CV-Sys Top: 19.2v 7.3a 139w
1206 07/27/23 13:27:52 SYSTEM OUTPUT	CV-Sys out: 52.7v 3.6a 188.6w
1205 07/27/23 13:12:52 SYSTEM OUTPUT	CV-Sys 19.4v 36.6c 36.3c
1204 07/27/23 13:12:52 SYSTEM OUTPUT	CV-Sys Min O/T/B: 180w 118w 138w
1203 07/27/23 13:12:52 SYSTEM OUTPUT	CV-Sys Max O/T/B: 331w 223w 251w
1202 07/27/23 13:12:52 SYSTEM OUTPUT	CV-Sys Bot: 19.4v 9.0a 174w
1201 07/27/23 13:12:52 SYSTEM OUTPUT	CV-Sys Top: 19.4v 6.7a 130w
1200 07/27/23 13:12:52 SYSTEM OUTPUT	CV-Sys out: 52.6v 3.6a 190.5w
1199 07/27/23 12:57:52 SYSTEM OUTPUT	CV-Sys 19.2v 36.7c 36.7c
1198 07/27/23 12:57:52 SYSTEM OUTPUT	CV-Sys Min O/T/B: 178w 122w 138w
1197 07/27/23 12:57:52 SYSTEM OUTPUT	CV-Sys Max O/T/B: 330w 223w 253w
1196 07/27/23 12:57:52 SYSTEM OUTPUT	CV-Sys Bot: 19.2v 8.2a 157w
1195 07/27/23 12:57:52 SYSTEM OUTPUT	CV-Sys Top: 19.2v 8.1a 156w
1194 07/27/23 12:57:52 SYSTEM OUTPUT	CV-Sys out: 52.7v 3.5a 184.1w
1193 07/27/23 12:42:52 SYSTEM OUTPUT	CV-Sys 19.2v 36.7c 36.5c
1192 07/27/23 12:42:52 SYSTEM OUTPUT	CV-Sys Min O/T/B: 179w 122w 138w
1191 07/27/23 12:42:52 SYSTEM OUTPUT	CV-Sys Max O/T/B: 328w 228w 255w
1190 07/27/23 12:42:52 SYSTEM OUTPUT	CV-Sys Bot: 19.2v 8.7a 166w
1189 07/27/23 12:42:52 SYSTEM OUTPUT	CV-Sys Top: 19.2v 7.3a 140w
1188 07/27/23 12:42:52 SYSTEM OUTPUT	CV-Sys out: 52.6v 3.7a 196.0w
1187 07/27/23 12:27:52 SYSTEM OUTPUT	CV-Sys 19.3v 36.6c 36.3c
1186 07/27/23 12:27:52 SYSTEM OUTPUT	CV-Sys Min O/T/B: 180w 121w 135w
1185 07/27/23 12:27:52 SYSTEM OUTPUT	CV-Sys Max O/T/B: 329w 227w 254w
1184 07/27/23 12:27:52 SYSTEM OUTPUT	CV-Sys Bot: 19.3v 8.7a 166w
1183 07/27/23 12:27:52 SYSTEM OUTPUT	CV-Sys Top: 19.3v 7.1a 136w
1182 07/27/23 12:27:52 SYSTEM OUTPUT	CV-Sys out: 52.7v 3.7a 193.9w
1181 07/27/23 12:12:52 SYSTEM OUTPUT	CV-Sys 19.4v 36.5c 36.8c
1180 07/27/23 12:12:52 SYSTEM OUTPUT	CV-Sys Min O/T/B: 182w 122w 134w
1179 07/27/23 12:12:52 SYSTEM OUTPUT	CV-Sys Max O/T/B: 331w 228w 253w
1178 07/27/23 12:12:52 SYSTEM OUTPUT	CV-Sys Bot: 19.4v 8.4a 161w
1177 07/27/23 12:12:52 SYSTEM OUTPUT	CV-Sys Top: 19.4v 8.1a 157w
1176 07/27/23 12:12:52 SYSTEM OUTPUT	CV-Sys out: 52.6v 3.8a 200.3w
1175 07/27/23 11:57:52 SYSTEM OUTPUT	CV-Sys 19.2v 36.7c 37.4c
1174 07/27/23 11:57:52 SYSTEM OUTPUT	CV-Sys Min O/T/B: 182w 124w 135w
1173 07/27/23 11:57:52 SYSTEM OUTPUT	CV-Sys Max O/T/B: 332w 230w 251w
1172 07/27/23 11:57:52 SYSTEM OUTPUT	CV-Sys Bot: 19.2v 8.6a 164w
1171 07/27/23 11:57:52 SYSTEM OUTPUT	CV-Sys Top: 19.2v 8.7a 168w
1170 07/27/23 11:57:52 SYSTEM OUTPUT	CV-Sys out: 52.6v 4.0a 211.3w
1169 07/27/23 11:42:52 SYSTEM OUTPUT	CV-Sys 19.0v 36.5c 38.6c
1168 07/27/23 11:42:52 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w

1167 07/27/23 11:42:52 SYSTEM OUTPUT	CV-Sys Max O/T/B: 467w 237w 342w
1166 07/27/23 11:42:52 SYSTEM OUTPUT	CV-Sys Bot: 19.1v 10.3a 196w
1165 07/27/23 11:42:52 SYSTEM OUTPUT	CV-Sys Top: 19.0v 8.7a 165w
1164 07/27/23 11:42:52 SYSTEM OUTPUT	CV-Sys out: 52.6v 4.3a 228.8w
1163 07/27/23 11:27:52 SYSTEM RUNNING	CV-Sys
1162 07/27/23 11:27:49 START UP DATA	CV-Sys Top/Bot OCV: 24.48v 23.40v
1161 07/27/23 11:27:43 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1160 07/27/23 11:27:43 START UP DATA	CV-Sys Alarms: 0000000000000000
1159 07/27/23 11:27:43 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1158 07/27/23 11:27:43 START UP DATA	CV-Sys FID = CC:02.07.08
1157 07/27/23 11:27:43 START UP DATA	CV-Sys LVS= 47.9,2,52.5,29.2
1156 07/27/23 11:27:43 START UP DATA	CV-Sys 52.9v,1973p,2.91v,2.94v
1155 07/27/23 11:27:43 CONTACT START	CV-Sys Contact SN: PPS23249002
1154 07/27/23 11:27:02 RUN END DATA	CV-Sys Days To Next Exer: 1
1153 07/27/23 11:27:02 RUN END DATA	CV-Sys T: 0 0 0.0
1152 07/27/23 11:27:02 RUN END DATA	CV-Sys B: 0 0 0.0
1151 07/27/23 11:27:02 RUN END DATA	CV-Sys O: 0 0 # 21
1150 07/27/23 11:27:02 RUN END DATA	CV-Sys 4:02h 2.57kh 635.79w
1149 07/27/23 11:27:02 CONTACT STOP	CV-Sys
1148 07/27/23 11:27:02 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1147 07/27/23 11:26:59 USER LOGGED IN	WEB ADMIN1
1146 07/27/23 11:26:41 START UP DATA	CV-Sys Alarms: 0000000000000000
1145 07/27/23 11:26:41 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1144 07/27/23 11:26:41 START UP DATA	CV-Sys FID = CC:02.07.08
1143 07/27/23 11:26:41 START UP DATA	CV-Sys LVS= 47.9,2,52.5,29.0
1142 07/27/23 11:26:41 START UP DATA	CV-Sys 49.9v,1969p,2.28v,2.19v
1141 07/27/23 11:26:41 CONTACT START	CV-Sys Contact SN: PPS23249002
1140 07/27/23 11:26:37 SYSTEM OUTPUT	CV-Sys Bot: 18.4v 0.4a 0w
1139 07/27/23 11:26:37 SYSTEM OUTPUT	CV-Sys Top: 22.4v 0.2a 0w
1138 07/27/23 11:26:36 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
1137 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
1136 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48
1135 07/27/23 11:26:36 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48
1134 07/27/23 11:26:24 SYSTEM DE-ENERGIZED	CC-Sys
1133 07/27/23 11:25:22 TRIP TIME CLEARED	WEB
1132 07/27/23 11:25:19 TRIP TIME CLEARED	WEB
1131 07/27/23 11:25:16 NETWORK PARAM CHG	FrDisp Trap 3: 000.000.000.000
1130 07/27/23 11:19:47 ALARM OFF	CV-Sys Mj,Rt H2 SensorLeak
1129 07/27/23 11:19:47 ALARM OFF	CV-Sys Mj,Lt H2 SensorLeak
1128 07/27/23 11:19:47 ALARM ON	CV-Sys Mj,System Down
1127 07/27/23 11:19:38 RUN END DATA	CV-Sys Days To Next Exer: 1
1126 07/27/23 11:19:38 RUN END DATA	CV-Sys T: 9 9 21.3
1125 07/27/23 11:19:38 RUN END DATA	CV-Sys B: 12 12 21.4
1124 07/27/23 11:19:38 RUN END DATA	CV-Sys O: 488 0 # 20
1123 07/27/23 11:19:38 RUN END DATA	CV-Sys 4:02h 2.57kh 635.79w
1122 07/27/23 11:19:38 SYSTEM OUTPUT	CV-Sys 21.4v 28.9c 25.0c
1121 07/27/23 11:19:38 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1120 07/27/23 11:19:38 SYSTEM OUTPUT	CV-Sys Max O/T/B: 0w 12w 13w
1119 07/27/23 11:19:38 SYSTEM OUTPUT	CV-Sys Bot: 21.2v 0.8a 11w
1118 07/27/23 11:19:38 SYSTEM OUTPUT	CV-Sys Top: 20.8v 1.4a 9w
1117 07/27/23 11:19:38 SYSTEM OUTPUT	CV-Sys out: 50.9v 0.0a 0.0w
1116 07/27/23 11:19:38 SYSTEM RUN ENDED	CV-Sys
1115 07/27/23 11:19:38 ALARM ON	CV-Sys Mj,Rt H2 SensorLeak

1114 07/27/23 11:19:38 ALARM ON	CV-Sys MJ,Lt H2 SensorLeak
1113 07/27/23 11:19:37 SYSTEM RUNNING	CV-Sys
1112 07/27/23 11:19:34 START UP DATA	CV-Sys Top/Bot OCV: 21.27v 20.72v
1111 07/27/23 11:19:29 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1110 07/27/23 11:19:08 START UP DATA	CV-Sys Alarms: 0000000000000000
1109 07/27/23 11:19:08 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1108 07/27/23 11:19:08 START UP DATA	CV-Sys FID = CC:02.07.08
1107 07/27/23 11:19:08 START UP DATA	CV-Sys LVS= 47.9,2,52.5,28.9
1106 07/27/23 11:19:08 START UP DATA	CV-Sys 51.1v,1978p,2.65v,2.69v
1105 07/27/23 11:19:08 CONTACT START	CV-Sys Contact SN: PPS23249002
1104 07/27/23 11:19:07 ALARM OFF	CV-Sys MJ,Rt H2 SensorLeak
1103 07/27/23 11:18:58 RUN END DATA	CV-Sys Days To Next Exer: 1
1102 07/27/23 11:18:58 RUN END DATA	CV-Sys T: 8 8 21.2
1101 07/27/23 11:18:58 RUN END DATA	CV-Sys B: 11 11 21.4
1100 07/27/23 11:18:58 RUN END DATA	CV-Sys O: 488 0 # 19
1099 07/27/23 11:18:58 RUN END DATA	CV-Sys 4:02h 2.57kh 635.83w
1098 07/27/23 11:18:58 SYSTEM OUTPUT	CV-Sys 21.3v 29.0c 25.0c
1097 07/27/23 11:18:58 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1096 07/27/23 11:18:58 SYSTEM OUTPUT	CV-Sys Max O/T/B: 0w 10w 13w
1095 07/27/23 11:18:58 SYSTEM OUTPUT	CV-Sys Bot: 21.2v 0.8a 11w
1094 07/27/23 11:18:58 SYSTEM OUTPUT	CV-Sys Top: 20.9v 1.2a 7w
1093 07/27/23 11:18:58 SYSTEM OUTPUT	CV-Sys out: 51.1v 0.0a 0.0w
1092 07/27/23 11:18:58 SYSTEM RUN ENDED	CV-Sys
1091 07/27/23 11:18:58 ALARM ON	CV-Sys MJ,Rt H2 SensorLeak
1090 07/27/23 11:18:57 SYSTEM RUNNING	CV-Sys
1089 07/27/23 11:18:54 START UP DATA	CV-Sys Top/Bot OCV: 21.15v 20.73v
1088 07/27/23 11:18:49 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1087 07/27/23 11:18:28 START UP DATA	CV-Sys Alarms: 0000000000000000
1086 07/27/23 11:18:28 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1085 07/27/23 11:18:28 START UP DATA	CV-Sys FID = CC:02.07.08
1084 07/27/23 11:18:28 START UP DATA	CV-Sys LVS= 47.9,2,52.5,28.9
1083 07/27/23 11:18:28 START UP DATA	CV-Sys 51.5v,1978p,2.69v,2.67v
1082 07/27/23 11:18:28 CONTACT START	CV-Sys Contact SN: PPS23249002
1081 07/27/23 11:18:27 ALARM OFF	CV-Sys MJ,Rt H2 SensorLeak
1080 07/27/23 11:18:18 RUN END DATA	CV-Sys Days To Next Exer: 1
1079 07/27/23 11:18:18 RUN END DATA	CV-Sys T: 0 0 19.0
1078 07/27/23 11:18:18 RUN END DATA	CV-Sys B: 0 0 19.0
1077 07/27/23 11:18:18 RUN END DATA	CV-Sys O: 0 0 # 18
1076 07/27/23 11:18:18 RUN END DATA	CV-Sys 4:02h 2.57kh 635.88w
1075 07/27/23 11:18:18 SYSTEM OUTPUT	CV-Sys 21.5v 29.2c 25.0c
1074 07/27/23 11:18:18 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1073 07/27/23 11:18:18 SYSTEM OUTPUT	CV-Sys Max O/T/B: 0w 12w 15w
1072 07/27/23 11:18:18 SYSTEM OUTPUT	CV-Sys Bot: 21.4v 0.7a 8w
1071 07/27/23 11:18:18 SYSTEM OUTPUT	CV-Sys Top: 21.0v 0.9a 4w
1070 07/27/23 11:18:18 SYSTEM OUTPUT	CV-Sys out: 51.4v 0.0a 0.0w
1069 07/27/23 11:18:18 SYSTEM RUN ENDED	CV-Sys
1068 07/27/23 11:18:18 ALARM ON	CV-Sys MJ,Rt H2 SensorLeak
1067 07/27/23 11:17:20 SYSTEM OUTPUT	CV-Sys 20.1v 29.0c 25.0c R
1066 07/27/23 11:17:20 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1065 07/27/23 11:17:20 SYSTEM OUTPUT	CV-Sys Max O/T/B: 194w 129w 147w
1064 07/27/23 11:17:20 SYSTEM OUTPUT	CV-Sys Bot: 20.2v 4.7a 93w R
1063 07/27/23 11:17:19 SYSTEM OUTPUT	CV-Sys Top: 20.2v 3.4a 75w R
1062 07/27/23 11:17:19 SYSTEM OUTPUT	CV-Sys out: 52.7v 1.3a 67.9w R

1061 07/27/23 11:05:32 SYSTEM OUTPUT	CV-Sys 20.1v 29.3c 25.0c R
1060 07/27/23 11:05:32 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1059 07/27/23 11:05:32 SYSTEM OUTPUT	CV-Sys Max O/T/B: 195w 125w 149w
1058 07/27/23 11:05:32 SYSTEM OUTPUT	CV-Sys Bot: 20.1v 5.3a 103w R
1057 07/27/23 11:05:32 SYSTEM OUTPUT	CV-Sys Top: 20.1v 3.9a 75w R
1056 07/27/23 11:05:31 SYSTEM OUTPUT	CV-Sys out: 52.7v 1.3a 66.2w R
1055 07/27/23 10:53:38 SYSTEM OUTPUT	CV-Sys 20.1v 28.6c 30.1c R
1054 07/27/23 10:53:38 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1053 07/27/23 10:53:38 SYSTEM OUTPUT	CV-Sys Max O/T/B: 270w 146w 197w
1052 07/27/23 10:53:38 SYSTEM OUTPUT	CV-Sys Bot: 20.1v 4.8a 102w R
1051 07/27/23 10:53:38 SYSTEM OUTPUT	CV-Sys Top: 20.1v 3.5a 67w R
1050 07/27/23 10:53:38 SYSTEM OUTPUT	CV-Sys out: 52.7v 1.1a 58.7w R
1049 07/27/23 10:41:50 SYSTEM RUNNING	CV-Sys
1048 07/27/23 10:41:47 START UP DATA	CV-Sys Top/Bot OCV: 23.63v 23.50v
1047 07/27/23 10:41:41 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1046 07/27/23 10:41:41 START UP DATA	CV-Sys Alarms: 0000000000000000
1045 07/27/23 10:41:41 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1044 07/27/23 10:41:41 START UP DATA	CV-Sys FID = CC:02.07.08
1043 07/27/23 10:41:41 START UP DATA	CV-Sys LVS= 47.9,2,52.5,26.8
1042 07/27/23 10:41:41 START UP DATA	CV-Sys 53.9v,1980p,2.82v,2.85v
1041 07/27/23 10:41:41 CONTACT START	CV-Sys Contact SN: PPS23249002
1040 07/27/23 10:41:30 USER LOGGED IN	WEB ADMIN1
1039 07/27/23 10:41:09 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.8a 0w
1038 07/27/23 10:41:09 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.9a 0w
1037 07/27/23 10:41:08 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
1036 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
1035 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48
1034 07/27/23 10:41:08 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48
1033 07/27/23 08:35:21 SYSTEM DE-ENERGIZED	CC-Sys
1032 07/27/23 08:33:01 RUN END DATA	CV-Sys Days To Next Exer: 1
1031 07/27/23 08:33:01 RUN END DATA	CV-Sys T: 175 313 17.8
1030 07/27/23 08:33:01 RUN END DATA	CV-Sys B: 189 332 17.8
1029 07/27/23 08:33:01 RUN END DATA	CV-Sys O: 257 543 # 17
1028 07/27/23 08:33:01 RUN END DATA	CV-Sys 3:28h 2.53kh 726.37w
1027 07/27/23 08:33:01 CONTACT STOP	CV-Sys
1026 07/27/23 08:33:01 SYSTEM OUTPUT	CV-Sys 20.6v 35.8c 28.5c
1025 07/27/23 08:33:01 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1024 07/27/23 08:33:00 SYSTEM OUTPUT	CV-Sys Max O/T/B: 558w 313w 332w
1023 07/27/23 08:33:00 SYSTEM OUTPUT	CV-Sys Bot: 20.6v 3.9a 97w
1022 07/27/23 08:33:00 SYSTEM OUTPUT	CV-Sys Top: 20.6v 3.1a 73w
1021 07/27/23 08:33:00 SYSTEM OUTPUT	CV-Sys out: 52.6v 1.1a 60.0w
1020 07/27/23 08:28:38 SYSTEM RUNNING	CV-Sys
1019 07/27/23 08:28:35 START UP DATA	CV-Sys Top/Bot OCV: 22.42v 22.18v
1018 07/27/23 08:28:29 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
1017 07/27/23 08:28:29 START UP DATA	CV-Sys Alarms: 0000000000000000
1016 07/27/23 08:28:29 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
1015 07/27/23 08:28:29 START UP DATA	CV-Sys FID = CC:02.07.08
1014 07/27/23 08:28:29 START UP DATA	CV-Sys LVS= 47.9,2,52.5,35.1
1013 07/27/23 08:28:29 START UP DATA	CV-Sys 52.8v,1980p,2.89v,2.91v
1012 07/27/23 08:28:29 CONTACT START	CV-Sys Contact SN: PPS23249002
1011 07/27/23 08:26:18 RUN END DATA	CV-Sys Days To Next Exer: 1
1010 07/27/23 08:26:18 RUN END DATA	CV-Sys T: 177 256 18.5
1009 07/27/23 08:26:18 RUN END DATA	CV-Sys B: 191 272 18.4

1008 07/27/23 08:26:18 RUN END DATA	CV-Sys O: 266 434 # 16
1007 07/27/23 08:26:18 RUN END DATA	CV-Sys 3:24h 2.51kh 736.66w
1006 07/27/23 08:26:18 CONTACT STOP	CV-Sys
1005 07/27/23 08:26:18 SYSTEM OUTPUT	CV-Sys 20.6v 36.5c 28.7c
1004 07/27/23 08:26:18 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
1003 07/27/23 08:26:18 SYSTEM OUTPUT	CV-Sys Max O/T/B: 432w 255w 272w
1002 07/27/23 08:26:17 SYSTEM OUTPUT	CV-Sys Bot: 20.6v 3.8a 104w
1001 07/27/23 08:26:17 SYSTEM OUTPUT	CV-Sys Top: 20.6v 3.2a 85w
1000 07/27/23 08:26:17 SYSTEM OUTPUT	CV-Sys out: 52.6v 1.3a 67.4w
0999 07/27/23 08:23:23 SYSTEM RUNNING	CV-Sys
0998 07/27/23 08:23:20 START UP DATA	CV-Sys Top/Bot OCV: 21.93v 21.88v
0997 07/27/23 08:23:14 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
0996 07/27/23 08:23:14 START UP DATA	CV-Sys Alarms: 0000000000000000
0995 07/27/23 08:23:14 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
0994 07/27/23 08:23:14 START UP DATA	CV-Sys FID = CC:02.07.08
0993 07/27/23 08:23:14 START UP DATA	CV-Sys LVS= 47.9,2,52.5,35.6
0992 07/27/23 08:23:14 START UP DATA	CV-Sys 52.7v,1982p,2.65v,2.68v
0991 07/27/23 08:23:14 CONTACT START	CV-Sys Contact SN: PPS23249002
0990 07/27/23 08:22:22 RUN END DATA	CV-Sys Days To Next Exer: 1
0989 07/27/23 08:22:22 RUN END DATA	CV-Sys T: 179 325 17.6
0988 07/27/23 08:22:22 RUN END DATA	CV-Sys B: 189 328 17.6
0987 07/27/23 08:22:22 RUN END DATA	CV-Sys O: 259 585 # 15
0986 07/27/23 08:22:22 RUN END DATA	CV-Sys 3:21h 2.49kh 743.44w
0985 07/27/23 08:22:22 CONTACT STOP	CV-Sys
0984 07/27/23 08:22:22 SYSTEM OUTPUT	CV-Sys 20.6v 35.9c 29.2c
0983 07/27/23 08:22:22 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
0982 07/27/23 08:22:22 SYSTEM OUTPUT	CV-Sys Max O/T/B: 627w 324w 328w
0981 07/27/23 08:22:22 SYSTEM OUTPUT	CV-Sys Bot: 20.6v 3.9a 87w
0980 07/27/23 08:22:22 SYSTEM OUTPUT	CV-Sys Top: 20.6v 3.0a 66w
0979 07/27/23 08:22:22 SYSTEM OUTPUT	CV-Sys out: 52.7v 1.4a 72.4w
0978 07/27/23 08:18:03 SYSTEM RUNNING	CV-Sys
0977 07/27/23 08:18:00 START UP DATA	CV-Sys Top/Bot OCV: 22.81v 22.52v
0976 07/27/23 08:17:54 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
0975 07/27/23 08:17:54 START UP DATA	CV-Sys Alarms: 0000000000000000
0974 07/27/23 08:17:54 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
0973 07/27/23 08:17:54 START UP DATA	CV-Sys FID = CC:02.07.08
0972 07/27/23 08:17:54 START UP DATA	CV-Sys LVS= 47.9,2,52.5,34.2
0971 07/27/23 08:17:54 START UP DATA	CV-Sys 52.9v,1989p,2.83v,2.85v
0970 07/27/23 08:17:54 CONTACT START	CV-Sys Contact SN: PPS23249002
0969 07/27/23 08:16:00 ALARM OFF	CV-Sys Mj,Rt H2 SensorLeak
0968 07/27/23 08:15:56 ALARM ON	CV-Sys Mj,Rt H2 SensorLeak
0967 07/27/23 08:15:37 RUN END DATA	CV-Sys Days To Next Exer: 1
0966 07/27/23 08:15:37 RUN END DATA	CV-Sys T: 180 321 17.5
0965 07/27/23 08:15:37 RUN END DATA	CV-Sys B: 189 319 17.5
0964 07/27/23 08:15:37 RUN END DATA	CV-Sys O: 259 556 # 14
0963 07/27/23 08:15:37 RUN END DATA	CV-Sys 3:17h 2.48kh 753.93w
0962 07/27/23 08:15:37 CONTACT STOP	CV-Sys
0961 07/27/23 08:15:37 SYSTEM OUTPUT	CV-Sys 20.6v 35.1c 29.1c
0960 07/27/23 08:15:37 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
0959 07/27/23 08:15:37 SYSTEM OUTPUT	CV-Sys Max O/T/B: 583w 321w 319w
0958 07/27/23 08:15:36 SYSTEM OUTPUT	CV-Sys Bot: 20.5v 3.7a 84w
0957 07/27/23 08:15:36 SYSTEM OUTPUT	CV-Sys Top: 20.5v 3.6a 88w
0956 07/27/23 08:15:36 SYSTEM OUTPUT	CV-Sys out: 52.6v 1.1a 59.8w

0955 07/27/23 08:10:36 SYSTEM RUNNING	CV-Sys
0954 07/27/23 08:10:33 START UP DATA	CV-Sys Top/Bot OCV: 22.03v 21.68v
0953 07/27/23 08:10:27 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
0952 07/27/23 08:10:27 START UP DATA	CV-Sys Alarms: 0000000000000000
0951 07/27/23 08:10:27 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
0950 07/27/23 08:10:27 START UP DATA	CV-Sys FID = CC:02.07.08
0949 07/27/23 08:10:27 START UP DATA	CV-Sys LVS= 47.9,2,52.5,32.8
0948 07/27/23 08:10:27 START UP DATA	CV-Sys 52.8v,1986p,2.79v,2.81v
0947 07/27/23 08:10:27 CONTACT START	CV-Sys Contact SN: PPS23249002
0946 07/27/23 08:09:17 RUN END DATA	CV-Sys Days To Next Exer: 1
0945 07/27/23 08:09:17 RUN END DATA	CV-Sys T: 179 255 17.9
0944 07/27/23 08:09:17 RUN END DATA	CV-Sys B: 187 335 17.4
0943 07/27/23 08:09:17 RUN END DATA	CV-Sys O: 262 438 # 13
0942 07/27/23 08:09:17 RUN END DATA	CV-Sys 3:12h 2.45kh 766.73w
0941 07/27/23 08:09:17 CONTACT STOP	CV-Sys
0940 07/27/23 08:09:17 SYSTEM OUTPUT	CV-Sys 20.7v 33.5c 28.5c
0939 07/27/23 08:09:17 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
0938 07/27/23 08:09:17 SYSTEM OUTPUT	CV-Sys Max O/T/B: 438w 254w 334w
0937 07/27/23 08:09:17 SYSTEM OUTPUT	CV-Sys Bot: 20.6v 3.2a 67w
0936 07/27/23 08:09:17 SYSTEM OUTPUT	CV-Sys Top: 20.6v 3.4a 70w
0935 07/27/23 08:09:16 SYSTEM OUTPUT	CV-Sys out: 52.6v 1.3a 66.4w
0934 07/27/23 07:59:59 SYSTEM RUNNING	CV-Sys
0933 07/27/23 07:59:56 START UP DATA	CV-Sys Top/Bot OCV: 24.26v 23.97v
0932 07/27/23 07:59:50 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
0931 07/27/23 07:59:50 START UP DATA	CV-Sys Alarms: 0000000000000000
0930 07/27/23 07:59:50 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
0929 07/27/23 07:59:50 START UP DATA	CV-Sys FID = CC:02.07.08
0928 07/27/23 07:59:50 START UP DATA	CV-Sys LVS= 47.9,2,52.5,22.5
0927 07/27/23 07:59:50 START UP DATA	CV-Sys 52.6v,1989p,2.79v,2.82v
0926 07/27/23 07:59:50 CONTACT START	CV-Sys Contact SN: PPS23249002
0925 07/27/23 07:59:36 USER LOGGED IN	WEB ADMIN1
0924 07/27/23 07:59:18 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 1.9a 0w
0923 07/27/23 07:59:18 SYSTEM OUTPUT	CV-Sys Top: 0.2v 1.7a 0w
0922 07/27/23 07:59:17 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
0921 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
0920 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48
0919 07/27/23 07:59:17 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48
0918 07/27/23 07:59:17 EXERCISE DATE CHG	CC-Sys Date was bad, Tomorrow Set
0917 07/20/23 06:53:12 SYSTEM DE-ENERGIZED	CC-Sys
0916 07/20/23 06:52:16 NOTIFICATION OFF	CV-Sys Nt,LowH2 Detect, Rt 2.46
0915 07/20/23 06:52:09 NOTIFICATION ON	CV-Sys Nt,LowH2 Detect, Rt 2.39
0914 07/20/23 06:51:39 ALARM OFF	CV-Sys Mj,Rt H2 SensorLeak
0913 07/20/23 06:51:34 ALARM ON	CV-Sys Mj,Rt H2 SensorLeak
0912 07/20/23 06:51:29 RUN END DATA	CV-Sys Days To Next Exer: 1
0911 07/20/23 06:51:29 RUN END DATA	CV-Sys T: 172 259 17.5
0910 07/20/23 06:51:29 RUN END DATA	CV-Sys B: 184 272 17.5
0909 07/20/23 06:51:29 RUN END DATA	CV-Sys O: 244 422 # 12
0908 07/20/23 06:51:29 RUN END DATA	CV-Sys 3:03h 2.41kh 792.57w
0907 07/20/23 06:51:29 CONTACT STOP	CV-Sys
0906 07/20/23 06:51:29 SYSTEM OUTPUT	CV-Sys 20.7v 35.6c 27.5c
0905 07/20/23 06:51:29 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
0904 07/20/23 06:51:28 SYSTEM OUTPUT	CV-Sys Max O/T/B: 448w 258w 271w
0903 07/20/23 06:51:28 SYSTEM OUTPUT	CV-Sys Bot: 20.6v 3.1a 78w

0902 07/20/23 06:51:28 SYSTEM OUTPUT	CV-Sys Top: 20.7v 2.7a 62w
0901 07/20/23 06:51:28 SYSTEM OUTPUT	CV-Sys out: 52.7v 1.0a 54.0w
0900 07/20/23 06:41:26 SYSTEM RUNNING	CV-Sys
0899 07/20/23 06:41:23 START UP DATA	CV-Sys Top/Bot OCV: 22.79v 22.26v
0898 07/20/23 06:41:17 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
0897 07/20/23 06:41:17 START UP DATA	CV-Sys Alarms: 0000000000000000
0896 07/20/23 06:41:17 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
0895 07/20/23 06:41:17 START UP DATA	CV-Sys FID = CC:02.07.08
0894 07/20/23 06:41:17 START UP DATA	CV-Sys LVS= 47.9,2,52.5,29.6
0893 07/20/23 06:41:17 START UP DATA	CV-Sys 52.9v,1999p,2.89v,2.92v
0892 07/20/23 06:41:17 CONTACT START	CV-Sys Contact SN: PPS23249002
0891 07/20/23 06:33:43 RUN END DATA	CV-Sys Days To Next Exer: 1
0890 07/20/23 06:33:43 RUN END DATA	CV-Sys T: 167 270 15.9
0889 07/20/23 06:33:43 RUN END DATA	CV-Sys B: 179 338 17.6
0888 07/20/23 06:33:43 RUN END DATA	CV-Sys O: 246 452 # 11
0887 07/20/23 06:33:43 RUN END DATA	CV-Sys 2:52h 2.37kh 824.39w
0886 07/20/23 06:33:43 CONTACT STOP	CV-Sys
0885 07/20/23 06:33:43 SYSTEM OUTPUT	CV-Sys 20.7v 31.2c 28.8c
0884 07/20/23 06:33:43 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
0883 07/20/23 06:33:42 SYSTEM OUTPUT	CV-Sys Max O/T/B: 455w 270w 338w
0882 07/20/23 06:33:42 SYSTEM OUTPUT	CV-Sys Bot: 20.6v 4.2a 79w
0881 07/20/23 06:33:42 SYSTEM OUTPUT	CV-Sys Top: 20.6v 3.0a 82w
0880 07/20/23 06:33:42 SYSTEM OUTPUT	CV-Sys out: 52.6v 1.3a 69.1w
0879 07/20/23 06:28:24 SYSTEM RUNNING	CV-Sys
0878 07/20/23 06:28:21 START UP DATA	CV-Sys Top/Bot OCV: 24.09v 23.87v
0877 07/20/23 06:28:15 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
0876 07/20/23 06:28:15 START UP DATA	CV-Sys Alarms: 0000000000000000
0875 07/20/23 06:28:15 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
0874 07/20/23 06:28:15 START UP DATA	CV-Sys FID = CC:02.07.08
0873 07/20/23 06:28:15 START UP DATA	CV-Sys LVS= 47.9,2,52.5,22.7
0872 07/20/23 06:28:15 START UP DATA	CV-Sys 52.9v,2002p,2.84v,2.88v
0871 07/20/23 06:28:15 CONTACT START	CV-Sys Contact SN: PPS23249002
0870 07/20/23 06:28:00 USER LOGGED IN	WEB ADMIN1
0869 07/20/23 06:26:50 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 1.3a 0w
0868 07/20/23 06:26:50 SYSTEM OUTPUT	CV-Sys Top: 0.2v 1.1a 0w
0867 07/20/23 06:26:49 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
0866 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
0865 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48
0864 07/20/23 06:26:49 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48
0863 07/20/23 06:26:49 EXERCISE DATE CHG	CC-Sys Date was bad, Tomorrow Set
0862 07/18/23 13:59:04 SYSTEM DE-ENERGIZED	CC-Sys
0861 07/18/23 13:48:44 RUN END DATA	CV-Sys Days To Next Exer: 1
0860 07/18/23 13:48:44 RUN END DATA	CV-Sys T: 158 212 19.3
0859 07/18/23 13:48:44 RUN END DATA	CV-Sys B: 189 252 19.2
0858 07/18/23 13:48:44 RUN END DATA	CV-Sys O: 244 322 # 10
0857 07/18/23 13:48:44 RUN END DATA	CV-Sys 2:47h 2.35kh 842.66w
0856 07/18/23 13:48:44 CONTACT STOP	CV-Sys
0855 07/18/23 13:48:44 SYSTEM OUTPUT	CV-Sys 20.4v 37.0c 29.7c
0854 07/18/23 13:48:44 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
0853 07/18/23 13:48:44 SYSTEM OUTPUT	CV-Sys Max O/T/B: 320w 212w 252w
0852 07/18/23 13:48:43 SYSTEM OUTPUT	CV-Sys Bot: 20.4v 4.6a 110w
0851 07/18/23 13:48:43 SYSTEM OUTPUT	CV-Sys Top: 20.4v 3.5a 87w
0850 07/18/23 13:48:43 SYSTEM OUTPUT	CV-Sys out: 52.6v 1.4a 73.0w

0849 07/18/23 13:45:23 SYSTEM RUNNING	CV-Sys
0848 07/18/23 13:45:20 START UP DATA	CV-Sys Top/Bot OCV: 22.32v 22.03v
0847 07/18/23 13:45:15 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
0846 07/18/23 13:45:14 START UP DATA	CV-Sys Alarms: 0000000000000000
0845 07/18/23 13:45:14 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
0844 07/18/23 13:45:14 START UP DATA	CV-Sys FID = CC:02.07.08
0843 07/18/23 13:45:14 START UP DATA	CV-Sys LVS= 47.9,2,52.5,35.5
0842 07/18/23 13:45:14 START UP DATA	CV-Sys 53.4v,2009p,2.92v,2.94v
0841 07/18/23 13:45:14 CONTACT START	CV-Sys Contact SN: PPS23249002
0840 07/18/23 13:41:26 RUN END DATA	CV-Sys Days To Next Exer: 1
0839 07/18/23 13:41:26 RUN END DATA	CV-Sys T: 155 213 19.2
0838 07/18/23 13:41:26 RUN END DATA	CV-Sys B: 188 253 19.2
0837 07/18/23 13:41:26 RUN END DATA	CV-Sys O: 240 316 # 9
0836 07/18/23 13:41:26 RUN END DATA	CV-Sys 2:44h 2.34kh 854.73w
0835 07/18/23 13:41:26 CONTACT STOP	CV-Sys
0834 07/18/23 13:41:26 SYSTEM OUTPUT	CV-Sys 20.4v 36.7c 29.0c
0833 07/18/23 13:41:26 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
0832 07/18/23 13:41:26 SYSTEM OUTPUT	CV-Sys Max O/T/B: 315w 212w 252w
0831 07/18/23 13:41:26 SYSTEM OUTPUT	CV-Sys Bot: 20.4v 3.8a 74w
0830 07/18/23 13:41:26 SYSTEM OUTPUT	CV-Sys Top: 20.4v 3.8a 72w
0829 07/18/23 13:41:26 SYSTEM OUTPUT	CV-Sys out: 52.6v 1.4a 75.8w
0828 07/18/23 13:37:57 SYSTEM RUNNING	CV-Sys
0827 07/18/23 13:37:54 START UP DATA	CV-Sys Top/Bot OCV: 22.52v 22.40v
0826 07/18/23 13:37:48 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
0825 07/18/23 13:37:48 START UP DATA	CV-Sys Alarms: 0000000000000000
0824 07/18/23 13:37:48 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
0823 07/18/23 13:37:48 START UP DATA	CV-Sys FID = CC:02.07.08
0822 07/18/23 13:37:48 START UP DATA	CV-Sys LVS= 47.9,2,52.5,34.7
0821 07/18/23 13:37:48 START UP DATA	CV-Sys 53.4v,2010p,2.93v,2.96v
0820 07/18/23 13:37:48 CONTACT START	CV-Sys Contact SN: PPS23249002
0819 07/18/23 13:31:18 USER LOGGED IN	WEB ADMIN1
0818 07/18/23 13:30:54 SYSTEM OUTPUT	CV-Sys Bot: 10.9v 0.4a 0w
0817 07/18/23 13:30:54 SYSTEM OUTPUT	CV-Sys Top: 22.1v 0.3a 0w
0816 07/18/23 13:30:53 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
0815 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
0814 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48
0813 07/18/23 13:30:53 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48
0812 07/18/23 13:23:37 SYSTEM DE-ENERGIZED	CC-Sys
0811 07/18/23 13:21:29 RUN END DATA	CV-Sys Days To Next Exer: 1
0810 07/18/23 13:21:29 RUN END DATA	CV-Sys T: 172 267 17.8
0809 07/18/23 13:21:29 RUN END DATA	CV-Sys B: 189 288 17.8
0808 07/18/23 13:21:29 RUN END DATA	CV-Sys O: 252 506 # 8
0807 07/18/23 13:21:29 RUN END DATA	CV-Sys 2:40h 2.32kh 868.01w
0806 07/18/23 13:21:29 CONTACT STOP	CV-Sys
0805 07/18/23 13:21:29 SYSTEM OUTPUT	CV-Sys 20.4v 36.8c 29.4c
0804 07/18/23 13:21:29 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
0803 07/18/23 13:21:29 SYSTEM OUTPUT	CV-Sys Max O/T/B: 635w 266w 288w
0802 07/18/23 13:21:29 SYSTEM OUTPUT	CV-Sys Bot: 20.4v 4.3a 85w
0801 07/18/23 13:21:29 SYSTEM OUTPUT	CV-Sys Top: 20.4v 3.2a 71w
0800 07/18/23 13:21:29 SYSTEM OUTPUT	CV-Sys out: 52.6v 1.3a 68.1w
0799 07/18/23 13:20:34 USER LOGGED IN	WEB ADMIN1
0798 07/18/23 13:20:21 USER LOGGED OUT	WEB ADMIN1
0797 07/18/23 13:11:35 SYSTEM RUNNING	CV-Sys

0796 07/18/23 13:11:32 START UP DATA	CV-Sys Top/Bot OCV: 21.61v 21.89v
0795 07/18/23 13:11:26 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
0794 07/18/23 13:11:26 START UP DATA	CV-Sys Alarms: 0000000000000000
0793 07/18/23 13:11:26 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
0792 07/18/23 13:11:26 START UP DATA	CV-Sys FID = CC:02.07.08
0791 07/18/23 13:11:26 START UP DATA	CV-Sys LVS= 47.9,2,52.5,36.8
0790 07/18/23 13:11:26 START UP DATA	CV-Sys 53.0v,2012p,2.60v,2.60v
0789 07/18/23 13:11:26 CONTACT START	CV-Sys Contact SN: PPS23249002
0788 07/18/23 13:10:42 RUN END DATA	CV-Sys Days To Next Exer: 1
0787 07/18/23 13:10:42 RUN END DATA	CV-Sys T: 164 254 18.1
0786 07/18/23 13:10:42 RUN END DATA	CV-Sys B: 186 290 18.1
0785 07/18/23 13:10:42 RUN END DATA	CV-Sys O: 250 476 # 7
0784 07/18/23 13:10:42 RUN END DATA	CV-Sys 2:30h 2.28kh 908.65w
0783 07/18/23 13:10:42 CONTACT STOP	CV-Sys
0782 07/18/23 13:10:42 SYSTEM OUTPUT	CV-Sys 20.5v 36.8c 29.4c
0781 07/18/23 13:10:41 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
0780 07/18/23 13:10:41 SYSTEM OUTPUT	CV-Sys Max O/T/B: 474w 254w 289w
0779 07/18/23 13:10:41 SYSTEM OUTPUT	CV-Sys Bot: 20.5v 3.8a 103w
0778 07/18/23 13:10:41 SYSTEM OUTPUT	CV-Sys Top: 20.5v 4.1a 86w
0777 07/18/23 13:10:41 SYSTEM OUTPUT	CV-Sys out: 52.6v 1.6a 84.0w
0776 07/18/23 13:07:32 SYSTEM RUNNING	CV-Sys
0775 07/18/23 13:07:29 START UP DATA	CV-Sys Top/Bot OCV: 22.40v 22.03v
0774 07/18/23 13:07:23 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
0773 07/18/23 13:07:23 START UP DATA	CV-Sys Alarms: 0000000000000000
0772 07/18/23 13:07:23 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
0771 07/18/23 13:07:23 START UP DATA	CV-Sys FID = CC:02.07.08
0770 07/18/23 13:07:23 START UP DATA	CV-Sys LVS= 47.9,2,52.5,36.1
0769 07/18/23 13:07:23 START UP DATA	CV-Sys 53.3v,2014p,2.90v,2.93v
0768 07/18/23 13:07:23 CONTACT START	CV-Sys Contact SN: PPS23249002
0767 07/18/23 13:05:01 RUN END DATA	CV-Sys Days To Next Exer: 1
0766 07/18/23 13:05:01 RUN END DATA	CV-Sys T: 169 225 19.1
0765 07/18/23 13:05:01 RUN END DATA	CV-Sys B: 187 255 19.1
0764 07/18/23 13:05:01 RUN END DATA	CV-Sys O: 246 333 # 6
0763 07/18/23 13:05:01 RUN END DATA	CV-Sys 2:27h 2.27kh 922.43w
0762 07/18/23 13:05:01 CONTACT STOP	CV-Sys
0761 07/18/23 13:05:01 SYSTEM OUTPUT	CV-Sys 20.4v 36.8c 30.2c
0760 07/18/23 13:05:01 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
0759 07/18/23 13:05:01 SYSTEM OUTPUT	CV-Sys Max O/T/B: 337w 224w 255w
0758 07/18/23 13:05:01 SYSTEM OUTPUT	CV-Sys Bot: 20.4v 4.0a 86w
0757 07/18/23 13:05:01 SYSTEM OUTPUT	CV-Sys Top: 20.3v 3.9a 86w
0756 07/18/23 13:05:01 SYSTEM OUTPUT	CV-Sys out: 52.6v 1.3a 70.7w
0755 07/18/23 12:58:26 SYSTEM RUNNING	CV-Sys
0754 07/18/23 12:58:23 START UP DATA	CV-Sys Top/Bot OCV: 22.86v 22.39v
0753 07/18/23 12:58:17 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
0752 07/18/23 12:58:17 START UP DATA	CV-Sys Alarms: 0000000000000000
0751 07/18/23 12:58:17 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
0750 07/18/23 12:58:17 START UP DATA	CV-Sys FID = CC:02.07.08
0749 07/18/23 12:58:17 START UP DATA	CV-Sys LVS= 47.9,2,52.5,35.6
0748 07/18/23 12:58:17 START UP DATA	CV-Sys 53.3v,2016p,2.91v,2.94v
0747 07/18/23 12:58:17 CONTACT START	CV-Sys Contact SN: PPS23249002
0746 07/18/23 12:53:44 RUN END DATA	CV-Sys Days To Next Exer: 1
0745 07/18/23 12:53:44 RUN END DATA	CV-Sys T: 174 235 19.4
0744 07/18/23 12:53:44 RUN END DATA	CV-Sys B: 189 250 18.4

0743 07/18/23 12:53:44 RUN END DATA	CV-Sys O: 254 383 # 5
0742 07/18/23 12:53:44 RUN END DATA	CV-Sys 2:21h 2.24kh 953.97w
0741 07/18/23 12:53:44 CONTACT STOP	CV-Sys
0740 07/18/23 12:53:44 SYSTEM OUTPUT	CV-Sys 20.6v 36.9c 28.9c
0739 07/18/23 12:53:44 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
0738 07/18/23 12:53:44 SYSTEM OUTPUT	CV-Sys Max O/T/B: 389w 235w 250w
0737 07/18/23 12:53:44 SYSTEM OUTPUT	CV-Sys Bot: 20.6v 4.1a 81w
0736 07/18/23 12:53:44 SYSTEM OUTPUT	CV-Sys Top: 20.5v 3.2a 62w
0735 07/18/23 12:53:43 SYSTEM OUTPUT	CV-Sys out: 52.6v 1.4a 75.1w
0734 07/18/23 12:45:46 SYSTEM RUNNING	CV-Sys
0733 07/18/23 12:45:43 START UP DATA	CV-Sys Top/Bot OCV: 22.30v 22.08v
0732 07/18/23 12:45:37 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
0731 07/18/23 12:45:37 START UP DATA	CV-Sys Alarms: 0000000000000000
0730 07/18/23 12:45:37 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
0729 07/18/23 12:45:37 START UP DATA	CV-Sys FID = CC:02.07.08
0728 07/18/23 12:45:37 START UP DATA	CV-Sys LVS= 47.9,2,52.5,36.4
0727 07/18/23 12:45:37 START UP DATA	CV-Sys 53.3v,2020p,2.85v,2.87v
0726 07/18/23 12:45:37 CONTACT START	CV-Sys Contact SN: PPS23249002
0725 07/18/23 12:44:51 USER LOGGED IN	WEB ADMIN1
0724 07/18/23 12:44:39 SYSTEM OUTPUT	CV-Sys Bot: 22.2v 0.6a 0w
0723 07/18/23 12:44:39 SYSTEM OUTPUT	CV-Sys Top: 22.3v 0.4a 0w
0722 07/18/23 12:44:38 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
0721 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
0720 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48
0719 07/18/23 12:44:38 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48
0718 07/18/23 12:44:31 SYSTEM DE-ENERGIZED	CC-Sys
0717 07/18/23 12:44:06 NOTIFICATION OFF	CV-Sys Nt,LowH2 Detect, Lt 2.46
0716 07/18/23 12:44:04 NOTIFICATION ON	CV-Sys Nt,LowH2 Detect, Lt 2.41
0715 07/18/23 12:43:34 ALARM OFF	CV-Sys Mj,Lt H2 SensorLeak
0714 07/18/23 12:43:29 ALARM ON	CV-Sys Mj,Lt H2 SensorLeak
0713 07/18/23 12:43:23 RUN END DATA	CV-Sys Days To Next Exer: 1
0712 07/18/23 12:43:23 RUN END DATA	CV-Sys T: 190 285 18.9
0711 07/18/23 12:43:23 RUN END DATA	CV-Sys B: 205 308 18.4
0710 07/18/23 12:43:23 RUN END DATA	CV-Sys O: 289 490 # 4
0709 07/18/23 12:43:23 RUN END DATA	CV-Sys 2:13h 2.21kh 996.15w
0708 07/18/23 12:43:23 CONTACT STOP	CV-Sys
0707 07/18/23 12:43:23 SYSTEM OUTPUT	CV-Sys 20.3v 37.1c 30.4c
0706 07/18/23 12:43:23 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
0705 07/18/23 12:43:23 SYSTEM OUTPUT	CV-Sys Max O/T/B: 492w 285w 308w
0704 07/18/23 12:43:23 SYSTEM OUTPUT	CV-Sys Bot: 20.2v 4.4a 88w
0703 07/18/23 12:43:22 SYSTEM OUTPUT	CV-Sys Top: 20.2v 4.3a 99w
0702 07/18/23 12:43:22 SYSTEM OUTPUT	CV-Sys out: 52.6v 1.7a 86.9w
0701 07/18/23 12:40:23 LOCATION CHG	WEB
0700 07/18/23 12:40:14 NAME CHG	WEB
0699 07/18/23 12:39:18 SYSTEM RUNNING	CV-Sys
0698 07/18/23 12:39:15 START UP DATA	CV-Sys Top/Bot OCV: 22.30v 22.05v
0697 07/18/23 12:39:10 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
0696 07/18/23 12:38:58 USER LOGGED IN	WEB ADMIN1
0695 07/18/23 12:38:49 START UP DATA	CV-Sys Alarms: 0000000000000000
0694 07/18/23 12:38:49 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
0693 07/18/23 12:38:49 START UP DATA	CV-Sys FID = CC:02.07.08
0692 07/18/23 12:38:49 START UP DATA	CV-Sys LVS= 47.9,2,52.5,35.1
0691 07/18/23 12:38:49 START UP DATA	CV-Sys 50.6v,2017p,2.46v,2.44v

0690 07/18/23 12:38:49 CONTACT START	CV-Sys Contact SN: PPS23249002
0689 07/18/23 12:38:45 SYSTEM OUTPUT	CV-Sys Bot: 0.1v 0.4a 0w
0688 07/18/23 12:38:45 SYSTEM OUTPUT	CV-Sys Top: 0.2v -0.3a 0w
0687 07/18/23 12:38:44 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
0686 06/14/23 13:17:42 EXERCISE DATE CHG	CV-Sys Date was bad, Tomorrow Set
0685 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48
0684 07/18/23 12:38:44 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48
0683 07/18/23 12:38:37 SYSTEM DE-ENERGIZED	CC-Sys
0682 07/18/23 12:37:50 RUN END DATA	CV-Sys Days To Next Exer: 28
0681 07/18/23 12:37:50 RUN END DATA	CV-Sys T: 119 260 18.0
0680 07/18/23 12:37:50 RUN END DATA	CV-Sys B: 105 277 18.0
0679 07/18/23 12:37:50 RUN END DATA	CV-Sys O: 182 435 # 3
0678 07/18/23 12:37:50 RUN END DATA	CV-Sys 2:09h 2.19kh 1018.35w
0677 07/18/23 12:37:50 SYSTEM OUTPUT	CV-Sys 9.6v 35.2c 25.0c
0676 07/18/23 12:37:50 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
0675 07/18/23 12:37:49 SYSTEM OUTPUT	CV-Sys Max O/T/B: 451w 259w 277w
0674 07/18/23 12:37:49 SYSTEM OUTPUT	CV-Sys Bot: 9.7v 0.5a 6w
0673 07/18/23 12:37:49 SYSTEM OUTPUT	CV-Sys Top: 9.7v -0.2a 0w
0672 07/18/23 12:37:49 SYSTEM OUTPUT	CV-Sys out: 51.9v 0.0a 0.0w
0671 07/18/23 12:37:49 SYSTEM RUN ENDED	CV-Sys
0670 07/18/23 12:37:49 ALARM ON	CV-Sys Mj,ModFail, ShortCV
0669 07/18/23 12:37:49 WARNING	CV-Sys Bot SCV Fail: 9.76 v
0668 07/18/23 12:37:33 SYSTEM RUNNING	CV-Sys
0667 07/18/23 12:37:30 START UP DATA	CV-Sys Top/Bot OCV: 20.60v 20.06v
0666 07/18/23 12:37:24 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
0665 07/18/23 12:37:24 START UP DATA	CV-Sys Alarms: 0000000000000000
0664 07/18/23 12:37:24 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
0663 07/18/23 12:37:24 START UP DATA	CV-Sys FID = CC:02.07.08
0662 07/18/23 12:37:24 START UP DATA	CV-Sys LVS= 47.9,2,52.5,35.3
0661 07/18/23 12:37:24 START UP DATA	CV-Sys 53.4v,2023p,2.89v,2.93v
0660 07/18/23 12:37:24 CONTACT START	CV-Sys Contact SN: PPS23249002
0659 07/18/23 12:34:29 LOW VOLT START CHG	WEB Setting = 47.9
0658 07/18/23 12:34:03 LOW VOLT START CHG	WEB Setting = 48.7
0657 07/18/23 12:33:40 RUN END DATA	CV-Sys Days To Next Exer: 28
0656 07/18/23 12:33:40 RUN END DATA	CV-Sys T: 181 233 19.3
0655 07/18/23 12:33:40 RUN END DATA	CV-Sys B: 187 247 19.2
0654 07/18/23 12:33:40 RUN END DATA	CV-Sys O: 254 348 # 2
0653 07/18/23 12:33:40 RUN END DATA	CV-Sys 2:08h 2.19kh 1020.12w
0652 07/18/23 12:33:40 CONTACT STOP	CV-Sys
0651 07/18/23 12:33:40 SYSTEM OUTPUT	CV-Sys 20.4v 36.5c 29.8c
0650 07/18/23 12:33:40 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
0649 07/18/23 12:33:39 SYSTEM OUTPUT	CV-Sys Max O/T/B: 348w 233w 247w
0648 07/18/23 12:33:39 SYSTEM OUTPUT	CV-Sys Bot: 20.4v 4.5a 108w
0647 07/18/23 12:33:39 SYSTEM OUTPUT	CV-Sys Top: 20.4v 3.6a 87w
0646 07/18/23 12:33:39 SYSTEM OUTPUT	CV-Sys out: 52.6v 1.6a 86.1w
0645 07/18/23 12:30:27 EXERCISE DATE CHG	WEB Reset due Exer Mode chg
0644 07/18/23 12:30:27 EXERCISE MODE CHG	WEB [AutoSchedule]
0643 07/18/23 12:30:01 EXERCISE DATE CHG	WEB User changed exercise day
0642 07/18/23 12:27:34 EXERCISE DATE CHG	WEB User changed exercise day
0641 07/18/23 12:27:16 EXERCISE DATE CHG	WEB User changed exercise day
0640 07/18/23 12:27:02 EXERCISE DATE CHG	WEB Reset due Exer Mode chg
0639 07/18/23 12:27:02 EXERCISE MODE CHG	WEB [NumberOfDays]
0638 07/18/23 12:20:03 SYSTEM RUNNING	CV-Sys

0637 07/18/23 12:20:00 START UP DATA CV-Sys Top/Bot OCV: 23.73v 23.01v
 0636 07/18/23 12:19:53 SYSTEM START ATTEMPT CV-Sys Bot/Top Modules
 0635 07/18/23 12:19:53 START UP DATA CV-Sys Alarms: 0000000000000000
 0634 07/18/23 12:19:53 START UP DATA CV-Sys FID = E11CV:02.07.08.TM
 0633 07/18/23 12:19:53 START UP DATA CV-Sys FID = CC:02.07.08
 0632 07/18/23 12:19:53 START UP DATA CV-Sys LVS= 50.0,2,52.5,26.1
 0631 07/18/23 12:19:53 START UP DATA CV-Sys 53.4v,2031p,2.86v,2.89v
 0630 07/18/23 12:19:53 CONTACT START CV-Sys Contact SN: PPS23249002
 0629 07/18/23 12:19:12 USER LOGGED IN WEB ADMIN1
 0628 07/18/23 12:18:52 NETWORK CFG APPLIED FrDisp
 0627 07/18/23 12:18:52 NETWORK PARAM CHG FrDisp Sub Net: 255.255.255.000
 0626 07/18/23 12:18:52 NETWORK PARAM CHG FrDisp IP Addr: 192.168.001.127
 0625 07/18/23 12:16:20 SYSTEM OUTPUT CV-Sys Bot: 0.2v 2.3a 0w
 0624 07/18/23 12:16:20 SYSTEM OUTPUT CV-Sys Top: 0.2v 2.1a 0w
 0623 06/14/23 13:17:42 CONV SYSTEM ENERGIZED CV-Sys Reset Status Reg: 0x48
 0622 07/18/23 12:16:19 SYSTEM ENERGIZED CC-Sys Reset Status Reg: 0x48
 0621 07/18/23 12:16:18 EXERCISE DATE CHG CC-Sys Date was bad, Tomorrow Set
 0620 06/24/23 14:29:41 SYSTEM DE-ENERGIZED CC-Sys
 0619 06/24/23 14:27:41 SYSTEM OUTPUT CV-Sys Bot: 0.3v 0.5a 0w
 0618 06/24/23 14:27:41 SYSTEM OUTPUT CV-Sys Top: 0.2v 0.4a 0w
 0617 06/14/23 13:17:42 CONV SYSTEM ENERGIZED CV-Sys Reset Status Reg: 0x48
 0616 06/24/23 14:27:40 SYSTEM ENERGIZED CC-Sys Reset Status Reg: 0x48
 0615 06/24/23 14:26:44 SYSTEM DE-ENERGIZED CC-Sys
 0614 06/24/23 14:24:44 SYSTEM OUTPUT CV-Sys Bot: 22.4v 0.4a 0w
 0613 06/24/23 14:24:44 SYSTEM OUTPUT CV-Sys Top: 22.2v 0.2a 0w
 0612 06/14/23 13:17:42 CONV SYSTEM ENERGIZED CV-Sys Reset Status Reg: 0x48
 0611 06/24/23 14:24:43 SYSTEM ENERGIZED CC-Sys Reset Status Reg: 0x48
 0610 06/24/23 14:20:18 SYSTEM DE-ENERGIZED CC-Sys
 0609 06/24/23 14:20:11 SYSTEM OUTPUT CV-Sys 21.4v 46.4c 56.8c
 0608 06/24/23 14:20:11 SYSTEM OUTPUT CV-Sys Min O/T/B: 1158w 626w 636w
 0607 06/24/23 14:20:11 SYSTEM OUTPUT CV-Sys Max O/T/B: 1180w 681w 688w
 0606 06/24/23 14:20:11 SYSTEM OUTPUT CV-Sys Bot: 18.1v 36.6a 660w
 0605 06/24/23 14:20:10 SYSTEM OUTPUT CV-Sys Top: 18.1v 36.5a 653w
 0604 06/24/23 14:20:10 SYSTEM OUTPUT CV-Sys out: 51.0v 23.0a 1173.6w
 0603 06/24/23 14:09:56 SYSTEM OUTPUT CV-Sys 18.1v 56.8c 56.7c
 0602 06/24/23 14:09:56 SYSTEM OUTPUT CV-Sys Min O/T/B: 1157w 626w 624w
 0601 06/24/23 14:09:56 SYSTEM OUTPUT CV-Sys Max O/T/B: 1181w 682w 688w
 0600 06/24/23 14:09:56 SYSTEM OUTPUT CV-Sys Bot: 18.1v 37.6a 681w
 0599 06/24/23 14:09:56 SYSTEM OUTPUT CV-Sys Top: 18.1v 34.7a 628w
 0598 06/24/23 14:09:56 SYSTEM OUTPUT CV-Sys out: 51.0v 23.0a 1173.4w
 0597 06/24/23 13:54:56 SYSTEM OUTPUT CV-Sys 17.9v 46.7c 46.9c
 0596 06/24/23 13:54:56 SYSTEM OUTPUT CV-Sys Min O/T/B: 1159w 626w 517w
 0595 06/24/23 13:54:56 SYSTEM OUTPUT CV-Sys Max O/T/B: 1180w 681w 698w
 0594 06/24/23 13:54:56 SYSTEM OUTPUT CV-Sys Bot: 17.9v 38.0a 680w
 0593 06/24/23 13:54:56 SYSTEM OUTPUT CV-Sys Top: 17.9v 36.7a 656w
 0592 06/24/23 13:54:56 SYSTEM OUTPUT CV-Sys out: 51.1v 23.0a 1178.2w
 0591 06/24/23 13:39:56 SYSTEM OUTPUT CV-Sys 18.0v 55.0c 56.9c
 0590 06/24/23 13:39:56 SYSTEM OUTPUT CV-Sys Min O/T/B: 1158w 618w 559w
 0589 06/24/23 13:39:56 SYSTEM OUTPUT CV-Sys Max O/T/B: 1180w 680w 692w
 0588 06/24/23 13:39:56 SYSTEM OUTPUT CV-Sys Bot: 18.0v 37.1a 666w
 0587 06/24/23 13:39:56 SYSTEM OUTPUT CV-Sys Top: 18.0v 37.2a 669w
 0586 06/24/23 13:39:56 SYSTEM OUTPUT CV-Sys out: 51.1v 23.0a 1175.7w
 0585 06/24/23 13:24:56 SYSTEM OUTPUT CV-Sys 18.0v 56.5c 56.9c

0584 06/24/23 13:24:56 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1157w 622w 621w
0583 06/24/23 13:24:56 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1181w 685w 689w
0582 06/24/23 13:24:56 SYSTEM OUTPUT	CV-Sys Bot: 18.0v 36.7a 658w
0581 06/24/23 13:24:56 SYSTEM OUTPUT	CV-Sys Top: 18.0v 37.3a 669w
0580 06/24/23 13:24:56 SYSTEM OUTPUT	CV-Sys out: 51.1v 23.0a 1177.1w
0579 06/24/23 13:09:56 SYSTEM OUTPUT	CV-Sys 17.9v 47.6c 46.8c
0578 06/24/23 13:09:56 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1158w 626w 521w
0577 06/24/23 13:09:56 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1180w 683w 691w
0576 06/24/23 13:09:56 SYSTEM OUTPUT	CV-Sys Bot: 17.9v 37.8a 678w
0575 06/24/23 13:09:56 SYSTEM OUTPUT	CV-Sys Top: 17.9v 35.1a 629w
0574 06/24/23 13:09:56 SYSTEM OUTPUT	CV-Sys out: 51.1v 23.0a 1177.6w
0573 06/24/23 12:54:56 SYSTEM OUTPUT	CV-Sys 18.0v 54.5c 57.0c
0572 06/24/23 12:54:56 SYSTEM OUTPUT	CV-Sys Min O/T/B: 727w 389w 397w
0571 06/24/23 12:54:56 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1291w 727w 752w
0570 06/24/23 12:54:56 SYSTEM OUTPUT	CV-Sys Bot: 18.0v 37.8a 679w
0569 06/24/23 12:54:56 SYSTEM OUTPUT	CV-Sys Top: 18.0v 36.6a 657w
0568 06/24/23 12:54:56 SYSTEM OUTPUT	CV-Sys out: 50.8v 23.1a 1171.7w
0567 06/24/23 12:39:56 SYSTEM OUTPUT	CV-Sys 19.0v 50.7c 51.2c
0566 06/24/23 12:39:56 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
0565 06/24/23 12:39:56 SYSTEM OUTPUT	CV-Sys Max O/T/B: 741w 445w 499w
0564 06/24/23 12:39:56 SYSTEM OUTPUT	CV-Sys Bot: 19.0v 22.5a 426w
0563 06/24/23 12:39:56 SYSTEM OUTPUT	CV-Sys Top: 19.0v 22.8a 431w
0562 06/24/23 12:39:56 SYSTEM OUTPUT	CV-Sys out: 52.8v 13.8a 730.5w
0561 06/24/23 12:24:56 CONDITION / HEALTH CHK	CV-Sys Sg:1 CSh:+0.032
FCMdV:18.17	
0560 06/24/23 12:24:53 START UP DATA	CV-Sys Top/Bot OCV: 23.67v 23.32v
0559 06/24/23 12:24:47 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
0558 06/24/23 12:24:33 START UP DATA	CV-Sys Alarms: 0000000000000000
0557 06/24/23 12:24:33 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
0556 06/24/23 12:24:33 START UP DATA	CV-Sys FID = CC:02.07.08
0555 06/24/23 12:24:33 START UP DATA	CV-Sys LVS= 50.0,2,52.5,25.7
0554 06/24/23 12:24:33 START UP DATA	CV-Sys 50.5v,N.A.p,2.61v,2.59v
0553 06/24/23 12:24:33 REMOTE START	E-Bus Condition SN: PPS23249002
0552 06/24/23 12:24:22 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 1.8a 0w
0551 06/24/23 12:24:22 SYSTEM OUTPUT	CV-Sys Top: 0.2v 1.7a 0w
0550 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48
0549 06/24/23 12:24:21 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48
0548 06/24/23 09:03:18 SYSTEM DE-ENERGIZED	CC-Sys
0547 06/24/23 09:02:41 EXERCISE DATE CHG	CV-Sys Tomorrow, Could Not Exer
0546 06/24/23 09:01:42 RUN END DATA	CV-Sys Days To Next Exer: 0
0545 06/24/23 09:01:42 RUN END DATA	CV-Sys T: 642 725 18.0
0544 06/24/23 09:01:42 RUN END DATA	CV-Sys B: 658 784 16.6
0543 06/24/23 09:01:42 RUN END DATA	CV-Sys O: 1153 1284 # 3
0542 06/24/23 09:01:42 RUN END DATA	CV-Sys 7:25h 8.54kh 1151.00w
0541 06/24/23 09:01:40 SYSTEM OUTPUT	CV-Sys 18.8v 51.5c 52.9c
0540 06/24/23 09:01:40 SYSTEM OUTPUT	CV-Sys Min O/T/B: 841w 419w 388w
0539 06/24/23 09:01:40 SYSTEM OUTPUT	CV-Sys Max O/T/B: 872w 497w 532w
0538 06/24/23 09:01:39 SYSTEM OUTPUT	CV-Sys Bot: 18.8v 25.7a 483w
0537 06/24/23 09:01:39 SYSTEM OUTPUT	CV-Sys Top: 18.8v 25.6a 486w
0536 06/24/23 09:01:39 SYSTEM OUTPUT	CV-Sys out: 50.3v 17.0a 853.1w
0535 06/24/23 09:01:39 CONDITION STAGE END	CV-Sys Health Chk V: 18.80
0534 06/24/23 08:51:37 SYSTEM OUTPUT	CV-Sys 18.9v 50.8c 52.8c
0533 06/24/23 08:51:37 SYSTEM OUTPUT	CV-Sys Min O/T/B: 851w 427w 470w

0532 06/24/23 08:51:37 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1179w 677w 693w
0531 06/24/23 08:51:37 SYSTEM OUTPUT	CV-Sys Bot: 18.9v 27.7a 524w
0530 06/24/23 08:51:37 SYSTEM OUTPUT	CV-Sys Top: 18.9v 23.4a 443w
0529 06/24/23 08:51:37 SYSTEM OUTPUT	CV-Sys out: 50.2v 17.0a 855.7w
0528 06/24/23 08:46:40 CONDITION STAGE END	CV-Sys TopESR:0.0107
BotESR:0.0103	
0527 06/24/23 08:46:40 CONDITION STAGE END	CV-Sys TopAmp: 35.8 BotAmp: 37.1
0526 06/24/23 08:46:40 CONDITION STAGE END	CV-Sys TopPwr: 651 BotPwr: 674
0525 06/24/23 08:46:40 CONDITION STAGE END	CV-Sys TopMxP: 678 BotMxP: 693
0524 06/24/23 08:46:40 CONDITION STAGE END	CV-Sys SysOutP: 1174 ModV: 18.17
0523 06/24/23 08:36:37 SYSTEM OUTPUT	CV-Sys 18.2v 56.7c 56.8c
0522 06/24/23 08:36:37 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1156w 621w 630w
0521 06/24/23 08:36:37 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1180w 684w 693w
0520 06/24/23 08:36:37 SYSTEM OUTPUT	CV-Sys Bot: 18.2v 37.8a 687w
0519 06/24/23 08:36:37 SYSTEM OUTPUT	CV-Sys Top: 18.2v 35.3a 641w
0518 06/24/23 08:36:37 SYSTEM OUTPUT	CV-Sys out: 51.2v 23.0a 1176.8w
0517 06/24/23 08:21:37 SYSTEM OUTPUT	CV-Sys 18.0v 46.4c 46.9c
0516 06/24/23 08:21:37 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1157w 625w 562w
0515 06/24/23 08:21:37 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1181w 676w 697w
0514 06/24/23 08:21:37 SYSTEM OUTPUT	CV-Sys Bot: 18.0v 36.8a 662w
0513 06/24/23 08:21:37 SYSTEM OUTPUT	CV-Sys Top: 18.0v 37.5a 675w
0512 06/24/23 08:21:37 SYSTEM OUTPUT	CV-Sys out: 51.1v 23.0a 1176.3w
0511 06/24/23 08:14:57 CONDITION STAGE END	CV-Sys Lp: 5 CvInV: 0.0
0510 06/24/23 08:06:37 SYSTEM OUTPUT	CV-Sys 18.1v 55.6c 56.9c
0509 06/24/23 08:06:37 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1157w 625w 527w
0508 06/24/23 08:06:37 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1180w 688w 693w
0507 06/24/23 08:06:37 SYSTEM OUTPUT	CV-Sys Bot: 18.1v 36.8a 665w
0506 06/24/23 08:06:37 SYSTEM OUTPUT	CV-Sys Top: 18.1v 37.0a 668w
0505 06/24/23 08:06:37 SYSTEM OUTPUT	CV-Sys out: 51.2v 23.0a 1177.3w
0504 06/24/23 07:52:04 CONDITION STAGE END	CV-Sys Lp: 4 CvInV: 0.0
0503 06/24/23 07:51:37 SYSTEM OUTPUT	CV-Sys 18.2v 55.6c 56.8c
0502 06/24/23 07:51:37 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1157w 627w 616w
0501 06/24/23 07:51:37 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1180w 687w 696w
0500 06/24/23 07:51:37 SYSTEM OUTPUT	CV-Sys Bot: 18.2v 37.6a 684w
0499 06/24/23 07:51:37 SYSTEM OUTPUT	CV-Sys Top: 18.2v 35.7a 648w
0498 06/24/23 07:51:37 SYSTEM OUTPUT	CV-Sys out: 51.1v 23.0a 1176.4w
0497 06/24/23 07:36:37 SYSTEM OUTPUT	CV-Sys 18.0v 47.1c 57.0c
0496 06/24/23 07:36:37 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1157w 625w 628w
0495 06/24/23 07:36:37 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1181w 684w 697w
0494 06/24/23 07:36:37 SYSTEM OUTPUT	CV-Sys Bot: 18.0v 37.7a 678w
0493 06/24/23 07:36:37 SYSTEM OUTPUT	CV-Sys Top: 18.0v 36.8a 661w
0492 06/24/23 07:36:37 SYSTEM OUTPUT	CV-Sys out: 51.0v 23.0a 1174.0w
0491 06/24/23 07:29:25 CONDITION STAGE END	CV-Sys Lp: 3 CvInV: 0.0
0490 06/24/23 07:21:37 SYSTEM OUTPUT	CV-Sys 18.1v 56.0c 56.8c
0489 06/24/23 07:21:37 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1157w 626w 572w
0488 06/24/23 07:21:37 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1181w 688w 692w
0487 06/24/23 07:21:37 SYSTEM OUTPUT	CV-Sys Bot: 18.1v 36.5a 662w
0486 06/24/23 07:21:37 SYSTEM OUTPUT	CV-Sys Top: 18.1v 37.1a 672w
0485 06/24/23 07:21:37 SYSTEM OUTPUT	CV-Sys out: 51.2v 23.0a 1178.0w
0484 06/24/23 07:06:37 SYSTEM OUTPUT	CV-Sys 18.4v 56.6c 46.6c
0483 06/24/23 07:06:37 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1157w 626w 490w
0482 06/24/23 07:06:37 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1181w 687w 693w
0481 06/24/23 07:06:37 SYSTEM OUTPUT	CV-Sys Bot: 18.4v 36.1a 664w

0480 06/24/23 07:06:37 SYSTEM OUTPUT	CV-Sys Top: 18.4v 34.2a 628w
0479 06/24/23 07:06:37 SYSTEM OUTPUT	CV-Sys out: 50.7v 23.0a 1166.3w
0478 06/24/23 07:06:36 CONDITION STAGE END	CV-Sys Lp: 2 CvInV: 0.0
0477 06/24/23 06:51:37 SYSTEM OUTPUT	CV-Sys 18.0v 49.5c 56.9c
0476 06/24/23 06:51:37 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1158w 623w 632w
0475 06/24/23 06:51:37 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1251w 708w 733w
0474 06/24/23 06:51:37 SYSTEM OUTPUT	CV-Sys Bot: 18.0v 37.6a 677w
0473 06/24/23 06:51:37 SYSTEM OUTPUT	CV-Sys Top: 18.0v 36.7a 661w
0472 06/24/23 06:51:37 SYSTEM OUTPUT	CV-Sys out: 51.2v 23.0a 1179.2w
0471 06/24/23 06:43:52 CONDITION STAGE END	CV-Sys Lp: 1 CvInV: 0.0
0470 06/24/23 06:36:37 SYSTEM OUTPUT	CV-Sys 18.1v 57.6c 57.2c
0469 06/24/23 06:36:37 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
0468 06/24/23 06:36:37 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1284w 724w 784w
0467 06/24/23 06:36:37 SYSTEM OUTPUT	CV-Sys Bot: 18.1v 38.3a 693w
0466 06/24/23 06:36:37 SYSTEM OUTPUT	CV-Sys Top: 18.1v 38.2a 692w
0465 06/24/23 06:36:37 SYSTEM OUTPUT	CV-Sys out: 52.5v 23.7a 1244.5w
0464 06/24/23 06:21:37 CONDITION / HEALTH CHK	CV-Sys Sg:3 CSh:+0.031
FCMdV:18.14	
0463 06/24/23 06:21:34 START UP DATA	CV-Sys Top/Bot OCV: 22.97v 22.74v
0462 06/24/23 06:21:28 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
0461 06/24/23 06:21:28 START UP DATA	CV-Sys Alarms: 0000000000000000
0460 06/24/23 06:21:28 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
0459 06/24/23 06:21:28 START UP DATA	CV-Sys FID = CC:02.07.08
0458 06/24/23 06:21:28 START UP DATA	CV-Sys LVS= 50.0,2,52.5,32.5
0457 06/24/23 06:21:28 START UP DATA	CV-Sys 50.5v,N.A.p,2.97v,2.98v
0456 06/24/23 06:20:21 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.3a 0w
0455 06/24/23 06:20:21 SYSTEM OUTPUT	CV-Sys Top: 0.5v 0.4a 0w
0454 06/24/23 06:05:21 SYSTEM OUTPUT	CV-Sys Bot: 0.6v 0.4a 0w
0453 06/24/23 06:05:21 SYSTEM OUTPUT	CV-Sys Top: 17.3v 0.3a 4w
0452 06/24/23 05:50:23 RUN END DATA	CV-Sys Days To Next Exer: 0
0451 06/24/23 05:50:23 RUN END DATA	CV-Sys T: 657 725 17.9
0450 06/24/23 05:50:23 RUN END DATA	CV-Sys B: 669 803 16.6
0449 06/24/23 05:50:23 RUN END DATA	CV-Sys O: 1176 1284 # 2
0448 06/24/23 05:50:23 RUN END DATA	CV-Sys 4:45h 5.46kh 1149.59w
0447 06/24/23 05:50:21 SYSTEM OUTPUT	CV-Sys 18.1v 55.2c 56.7c
0446 06/24/23 05:50:21 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1156w 630w 643w
0445 06/24/23 05:50:21 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1180w 676w 689w
0444 06/24/23 05:50:21 SYSTEM OUTPUT	CV-Sys Bot: 18.2v 36.7a 664w
0443 06/24/23 05:50:21 SYSTEM OUTPUT	CV-Sys Top: 18.2v 36.3a 657w
0442 06/24/23 05:50:21 SYSTEM OUTPUT	CV-Sys out: 51.2v 23.0a 1176.8w
0441 06/24/23 05:50:20 CONDITION STAGE END	CV-Sys TopESR:0.0102
BotESR:0.0106	
0440 06/24/23 05:50:20 CONDITION STAGE END	CV-Sys TopAmp: 36.2 BotAmp: 36.9
0439 06/24/23 05:50:20 CONDITION STAGE END	CV-Sys TopPwr: 658 BotPwr: 670
0438 06/24/23 05:50:20 CONDITION STAGE END	CV-Sys TopMxP: 685 BotMxP: 690
0437 06/24/23 05:50:20 CONDITION STAGE END	CV-Sys SysOutP: 1175 ModV: 18.15
0436 06/24/23 05:45:26 SYSTEM OUTPUT	CV-Sys 18.1v 55.2c 56.9c
0435 06/24/23 05:45:26 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1157w 622w 628w
0434 06/24/23 05:45:26 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1181w 686w 688w
0433 06/24/23 05:45:26 SYSTEM OUTPUT	CV-Sys Bot: 18.1v 37.6a 679w
0432 06/24/23 05:45:26 SYSTEM OUTPUT	CV-Sys Top: 18.1v 36.4a 658w
0431 06/24/23 05:45:26 SYSTEM OUTPUT	CV-Sys out: 51.1v 23.0a 1175.2w
0430 06/24/23 05:30:26 SYSTEM OUTPUT	CV-Sys 17.9v 46.7c 46.6c

0429 06/24/23 05:30:26 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1157w 627w 634w
0428 06/24/23 05:30:26 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1181w 679w 697w
0427 06/24/23 05:30:26 SYSTEM OUTPUT	CV-Sys Bot: 17.9v 37.7a 674w
0426 06/24/23 05:30:26 SYSTEM OUTPUT	CV-Sys Top: 17.9v 35.5a 634w
0425 06/24/23 05:30:26 SYSTEM OUTPUT	CV-Sys out: 51.2v 23.0a 1178.5w
0424 06/24/23 05:15:26 SYSTEM OUTPUT	CV-Sys 18.1v 56.6c 56.6c
0423 06/24/23 05:15:26 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1156w 628w 628w
0422 06/24/23 05:15:26 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1181w 685w 693w
0421 06/24/23 05:15:26 SYSTEM OUTPUT	CV-Sys Bot: 18.1v 35.4a 641w
0420 06/24/23 05:15:26 SYSTEM OUTPUT	CV-Sys Top: 18.1v 36.5a 661w
0419 06/24/23 05:15:26 SYSTEM OUTPUT	CV-Sys out: 51.1v 23.0a 1176.8w
0418 06/24/23 05:00:26 SYSTEM OUTPUT	CV-Sys 18.0v 56.0c 56.9c
0417 06/24/23 05:00:26 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1156w 633w 589w
0416 06/24/23 05:00:26 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1180w 679w 691w
0415 06/24/23 05:00:26 SYSTEM OUTPUT	CV-Sys Bot: 18.1v 37.1a 669w
0414 06/24/23 05:00:26 SYSTEM OUTPUT	CV-Sys Top: 18.0v 36.8a 664w
0413 06/24/23 05:00:26 SYSTEM OUTPUT	CV-Sys out: 50.9v 23.0a 1171.4w
0412 06/24/23 04:45:26 SYSTEM OUTPUT	CV-Sys 18.2v 57.0c 56.6c
0411 06/24/23 04:45:26 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1158w 623w 629w
0410 06/24/23 04:45:26 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1180w 683w 692w
0409 06/24/23 04:45:26 SYSTEM OUTPUT	CV-Sys Bot: 18.2v 36.5a 663w
0408 06/24/23 04:45:26 SYSTEM OUTPUT	CV-Sys Top: 18.1v 35.7a 647w
0407 06/24/23 04:45:26 SYSTEM OUTPUT	CV-Sys out: 51.2v 23.0a 1177.8w
0406 06/24/23 04:30:26 SYSTEM OUTPUT	CV-Sys 18.1v 54.9c 56.9c
0405 06/24/23 04:30:26 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1157w 628w 636w
0404 06/24/23 04:30:26 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1181w 683w 696w
0403 06/24/23 04:30:26 SYSTEM OUTPUT	CV-Sys Bot: 18.1v 37.0a 668w
0402 06/24/23 04:30:26 SYSTEM OUTPUT	CV-Sys Top: 18.1v 36.8a 665w
0401 06/24/23 04:30:26 SYSTEM OUTPUT	CV-Sys out: 50.7v 23.0a 1166.0w
0400 06/24/23 04:15:26 SYSTEM OUTPUT	CV-Sys 18.0v 46.7c 56.8c
0399 06/24/23 04:15:26 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1157w 627w 623w
0398 06/24/23 04:15:26 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1181w 681w 697w
0397 06/24/23 04:15:26 SYSTEM OUTPUT	CV-Sys Bot: 18.0v 36.2a 650w
0396 06/24/23 04:15:26 SYSTEM OUTPUT	CV-Sys Top: 18.0v 37.0a 664w
0395 06/24/23 04:15:26 SYSTEM OUTPUT	CV-Sys out: 51.2v 23.0a 1177.4w
0394 06/24/23 04:00:26 SYSTEM OUTPUT	CV-Sys 18.1v 56.1c 56.9c
0393 06/24/23 04:00:26 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1157w 623w 605w
0392 06/24/23 04:00:26 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1181w 687w 689w
0391 06/24/23 04:00:26 SYSTEM OUTPUT	CV-Sys Bot: 18.1v 38.1a 689w
0390 06/24/23 04:00:26 SYSTEM OUTPUT	CV-Sys Top: 18.1v 35.7a 645w
0389 06/24/23 04:00:26 SYSTEM OUTPUT	CV-Sys out: 51.0v 23.0a 1174.6w
0388 06/24/23 03:45:26 SYSTEM OUTPUT	CV-Sys 17.9v 46.5c 46.8c
0387 06/24/23 03:45:26 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1158w 629w 472w
0386 06/24/23 03:45:26 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1249w 712w 727w
0385 06/24/23 03:45:26 SYSTEM OUTPUT	CV-Sys Bot: 17.9v 38.1a 679w
0384 06/24/23 03:45:26 SYSTEM OUTPUT	CV-Sys Top: 17.8v 37.2a 664w
0383 06/24/23 03:45:26 SYSTEM OUTPUT	CV-Sys out: 51.2v 23.0a 1180.8w
0382 06/24/23 03:30:26 SYSTEM OUTPUT	CV-Sys 17.8v 55.5c 57.7c
0381 06/24/23 03:30:26 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
0380 06/24/23 03:30:26 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1284w 725w 802w
0379 06/24/23 03:30:26 SYSTEM OUTPUT	CV-Sys Bot: 17.8v 40.0a 711w
0378 06/24/23 03:30:26 SYSTEM OUTPUT	CV-Sys Top: 17.8v 39.6a 705w
0377 06/24/23 03:30:26 SYSTEM OUTPUT	CV-Sys out: 52.7v 23.7a 1248.5w

0376 06/24/23 03:15:26 CONDITION / HEALTH CHK CV-Sys Sg:2 CSh:+0.031
 FCMdV:18.14

0375 06/24/23 03:15:23 START UP DATA CV-Sys Top/Bot OCV: 22.95v 22.74v
 0374 06/24/23 03:15:17 SYSTEM START ATTEMPT CV-Sys Bot/Top Modules
 0373 06/24/23 03:15:17 START UP DATA CV-Sys Alarms: 0000000000000000
 0372 06/24/23 03:15:17 START UP DATA CV-Sys FID = E11CV:02.07.08.TM
 0371 06/24/23 03:15:17 START UP DATA CV-Sys FID = CC:02.07.08
 0370 06/24/23 03:15:17 START UP DATA CV-Sys LVS= 50.0,2,52.5,33.2
 0369 06/24/23 03:15:17 START UP DATA CV-Sys 50.5v,N.A.p,2.95v,2.97v
 0368 06/24/23 03:14:10 SYSTEM OUTPUT CV-Sys Bot: 0.2v 0.3a 0w
 0367 06/24/23 03:14:10 SYSTEM OUTPUT CV-Sys Top: 0.4v 0.3a 0w
 0366 06/24/23 02:59:10 SYSTEM OUTPUT CV-Sys Bot: 0.6v 0.2a 0w
 0365 06/24/23 02:59:10 SYSTEM OUTPUT CV-Sys Top: 13.6v 0.2a 2w
 0364 06/24/23 02:44:12 RUN END DATA CV-Sys Days To Next Exer: 0
 0363 06/24/23 02:44:12 RUN END DATA CV-Sys T: 626 732 17.3
 0362 06/24/23 02:44:12 RUN END DATA CV-Sys B: 633 752 17.5
 0361 06/24/23 02:44:12 RUN END DATA CV-Sys O: 1117 1288 # 1
 0360 06/24/23 02:44:12 RUN END DATA CV-Sys 2:10h 2.42kh 1117.43w
 0359 06/24/23 02:44:10 SYSTEM OUTPUT CV-Sys 18.1v 55.6c 56.7c
 0358 06/24/23 02:44:10 SYSTEM OUTPUT CV-Sys Min O/T/B: 1158w 631w 536w
 0357 06/24/23 02:44:10 SYSTEM OUTPUT CV-Sys Max O/T/B: 1179w 688w 695w
 0356 06/24/23 02:44:09 SYSTEM OUTPUT CV-Sys Bot: 18.1v 36.3a 652w
 0355 06/24/23 02:44:09 SYSTEM OUTPUT CV-Sys Top: 18.1v 36.5a 654w
 0354 06/24/23 02:44:09 SYSTEM OUTPUT CV-Sys out: 51.1v 23.0a 1176.8w
 0353 06/24/23 02:44:09 CONDITION STAGE END CV-Sys TopESR:0.0107
 BotESR:0.0105

0352 06/24/23 02:44:09 CONDITION STAGE END CV-Sys TopAmp: 36.3 BotAmp: 36.8
 0351 06/24/23 02:44:09 CONDITION STAGE END CV-Sys TopPwr: 659 BotPwr: 665
 0350 06/24/23 02:44:09 CONDITION STAGE END CV-Sys TopMxP: 688 BotMxP: 696
 0349 06/24/23 02:44:09 CONDITION STAGE END CV-Sys SysOutP: 1174 ModV: 18.11
 0348 06/24/23 02:33:51 SYSTEM OUTPUT CV-Sys 18.1v 54.8c 56.8c
 0347 06/24/23 02:33:51 SYSTEM OUTPUT CV-Sys Min O/T/B: 1157w 625w 633w
 0346 06/24/23 02:33:51 SYSTEM OUTPUT CV-Sys Max O/T/B: 1181w 693w 696w
 0345 06/24/23 02:33:51 SYSTEM OUTPUT CV-Sys Bot: 18.1v 36.0a 653w
 0344 06/24/23 02:33:51 SYSTEM OUTPUT CV-Sys Top: 18.1v 37.4a 678w
 0343 06/24/23 02:33:51 SYSTEM OUTPUT CV-Sys out: 51.1v 23.0a 1177.1w
 0342 06/24/23 02:18:51 SYSTEM OUTPUT CV-Sys 18.1v 55.4c 56.7c
 0341 06/24/23 02:18:51 SYSTEM OUTPUT CV-Sys Min O/T/B: 1157w 632w 612w
 0340 06/24/23 02:18:51 SYSTEM OUTPUT CV-Sys Max O/T/B: 1181w 691w 684w
 0339 06/24/23 02:18:51 SYSTEM OUTPUT CV-Sys Bot: 18.1v 36.3a 654w
 0338 06/24/23 02:18:51 SYSTEM OUTPUT CV-Sys Top: 18.1v 36.5a 659w
 0337 06/24/23 02:18:51 SYSTEM OUTPUT CV-Sys out: 51.1v 23.0a 1176.2w
 0336 06/24/23 02:03:51 SYSTEM OUTPUT CV-Sys 18.1v 47.6c 46.8c
 0335 06/24/23 02:03:51 SYSTEM OUTPUT CV-Sys Min O/T/B: 1157w 631w 584w
 0334 06/24/23 02:03:51 SYSTEM OUTPUT CV-Sys Max O/T/B: 1180w 684w 694w
 0333 06/24/23 02:03:51 SYSTEM OUTPUT CV-Sys Bot: 18.1v 36.9a 666w
 0332 06/24/23 02:03:51 SYSTEM OUTPUT CV-Sys Top: 18.1v 35.9a 648w
 0331 06/24/23 02:03:51 SYSTEM OUTPUT CV-Sys out: 51.1v 23.0a 1177.0w
 0330 06/24/23 01:48:51 SYSTEM OUTPUT CV-Sys 18.1v 57.0c 56.7c
 0329 06/24/23 01:48:51 SYSTEM OUTPUT CV-Sys Min O/T/B: 1157w 631w 626w
 0328 06/24/23 01:48:51 SYSTEM OUTPUT CV-Sys Max O/T/B: 1180w 693w 691w
 0327 06/24/23 01:48:51 SYSTEM OUTPUT CV-Sys Bot: 18.1v 36.7a 663w
 0326 06/24/23 01:48:51 SYSTEM OUTPUT CV-Sys Top: 18.1v 35.7a 646w

0325 06/24/23 01:48:51 SYSTEM OUTPUT CV-Sys out: 50.6v 23.0a 1166.2w
 0324 06/24/23 01:33:51 SYSTEM OUTPUT CV-Sys 18.1v 56.9c 56.6c
 0323 06/24/23 01:33:51 SYSTEM OUTPUT CV-Sys Min O/T/B: 1156w 632w 628w
 0322 06/24/23 01:33:51 SYSTEM OUTPUT CV-Sys Max O/T/B: 1180w 692w 691w
 0321 06/24/23 01:33:51 SYSTEM OUTPUT CV-Sys Bot: 18.1v 35.7a 645w
 0320 06/24/23 01:33:51 SYSTEM OUTPUT CV-Sys Top: 18.1v 36.3a 656w
 0319 06/24/23 01:33:51 SYSTEM OUTPUT CV-Sys out: 51.1v 23.0a 1176.5w
 0318 06/24/23 01:18:51 SYSTEM OUTPUT CV-Sys 18.0v 46.6c 46.8c
 0317 06/24/23 01:18:51 SYSTEM OUTPUT CV-Sys Min O/T/B: 1156w 631w 483w
 0316 06/24/23 01:18:51 SYSTEM OUTPUT CV-Sys Max O/T/B: 1180w 692w 690w
 0315 06/24/23 01:18:51 SYSTEM OUTPUT CV-Sys Bot: 18.0v 37.9a 683w
 0314 06/24/23 01:18:51 SYSTEM OUTPUT CV-Sys Top: 18.0v 36.0a 649w
 0313 06/24/23 01:18:51 SYSTEM OUTPUT CV-Sys out: 50.8v 23.0a 1169.6w
 0312 06/24/23 01:03:51 SYSTEM OUTPUT CV-Sys 17.9v 54.9c 57.0c
 0311 06/24/23 01:03:51 SYSTEM OUTPUT CV-Sys Min O/T/B: 726w 388w 393w
 0310 06/24/23 01:03:51 SYSTEM OUTPUT CV-Sys Max O/T/B: 1290w 731w 751w
 0309 06/24/23 01:03:51 SYSTEM OUTPUT CV-Sys Bot: 17.9v 37.9a 678w
 0308 06/24/23 01:03:51 SYSTEM OUTPUT CV-Sys Top: 17.9v 37.1a 664w
 0307 06/24/23 01:03:51 SYSTEM OUTPUT CV-Sys out: 51.2v 23.0a 1176.7w
 0306 06/24/23 00:48:51 SYSTEM OUTPUT CV-Sys 19.1v 50.6c 51.0c
 0305 06/24/23 00:48:51 SYSTEM OUTPUT CV-Sys Min O/T/B: 0w 0w 0w
 0304 06/24/23 00:48:51 SYSTEM OUTPUT CV-Sys Max O/T/B: 738w 447w 568w
 0303 06/24/23 00:48:51 SYSTEM OUTPUT CV-Sys Bot: 19.1v 21.4a 409w
 0302 06/24/23 00:48:51 SYSTEM OUTPUT CV-Sys Top: 19.1v 22.9a 438w
 0301 06/24/23 00:48:51 SYSTEM OUTPUT CV-Sys out: 52.9v 13.8a 729.6w
 0300 06/24/23 00:33:51 CONDITION / HEALTH CHK CV-Sys Sg:1 CSh:+0.031
 FCMdV:18.14

0299 06/24/23 00:33:48 START UP DATA CV-Sys Top/Bot OCV: 23.86v 23.34v
 0298 06/24/23 00:33:43 SYSTEM START ATTEMPT CV-Sys Bot/Top Modules
 0297 06/24/23 00:33:29 START UP DATA CV-Sys Alarms: 0000000000000000
 0296 06/24/23 00:33:29 START UP DATA CV-Sys FID = E11CV:02.07.08.TM
 0295 06/24/23 00:33:29 START UP DATA CV-Sys FID = CC:02.07.08
 0294 06/24/23 00:33:29 START UP DATA CV-Sys LVS= 50.0,2,52.5,27.4
 0293 06/24/23 00:33:29 START UP DATA CV-Sys 50.5v,N.A.p,2.63v,2.61v
 0292 06/24/23 00:33:29 REMOTE START E-Bus Condition SN: PPS23249002
 0291 06/24/23 00:33:18 SYSTEM OUTPUT CV-Sys Bot: 0.3v 0.7a 0w
 0290 06/24/23 00:33:18 SYSTEM OUTPUT CV-Sys Top: 5.3v 0.8a 0w
 0289 06/14/23 13:17:42 CONV SYSTEM ENERGIZED CV-Sys Reset Status Reg: 0x48
 0288 06/24/23 00:33:16 SYSTEM ENERGIZED CC-Sys Reset Status Reg: 0x48
 0287 06/24/23 00:30:23 SYSTEM DE-ENERGIZED CC-Sys
 0286 06/24/23 00:29:22 SYSTEM OUTPUT CV-Sys Bot: 0.1v 1.0a 0w
 0285 06/24/23 00:29:22 SYSTEM OUTPUT CV-Sys Top: 0.2v 0.9a 0w
 0284 06/14/23 13:17:42 CONV SYSTEM ENERGIZED CV-Sys Reset Status Reg: 0x48
 0283 06/24/23 00:29:20 SYSTEM ENERGIZED CC-Sys Reset Status Reg: 0x48
 0282 06/23/23 23:49:01 SYSTEM DE-ENERGIZED CC-Sys
 0281 06/23/23 23:47:59 SYSTEM OUTPUT CV-Sys Bot: 11.9v 0.5a 0w
 0280 06/23/23 23:47:59 SYSTEM OUTPUT CV-Sys Top: 21.3v 0.4a 0w
 0279 06/14/23 13:17:42 CONV SYSTEM ENERGIZED CV-Sys Reset Status Reg: 0x48
 0278 06/23/23 23:47:58 SYSTEM ENERGIZED CC-Sys Reset Status Reg: 0x48
 0277 06/23/23 23:45:28 SYSTEM DE-ENERGIZED CC-Sys
 0276 06/23/23 23:44:26 SYSTEM OUTPUT CV-Sys Bot: 11.3v 0.5a 0w
 0275 06/23/23 23:44:26 SYSTEM OUTPUT CV-Sys Top: 21.9v 0.3a 0w
 0274 06/14/23 13:17:42 CONV SYSTEM ENERGIZED CV-Sys Reset Status Reg: 0x48

0273 06/23/23 23:44:25 SYSTEM ENERGIZED CC-Sys Reset Status Reg: 0x48
 0272 06/23/23 23:43:16 SYSTEM DE-ENERGIZED CC-Sys
 0271 06/23/23 23:42:14 SYSTEM OUTPUT CV-Sys Bot: 0.9v 0.2a 0w
 0270 06/23/23 23:42:14 SYSTEM OUTPUT CV-Sys Top: 5.5v 0.2a 0w
 0269 06/14/23 13:17:42 CONV SYSTEM ENERGIZED CV-Sys Reset Status Reg: 0x48
 0268 06/23/23 23:42:13 SYSTEM ENERGIZED CC-Sys Reset Status Reg: 0x48
 0267 06/23/23 23:40:42 SYSTEM DE-ENERGIZED CC-Sys
 0266 06/23/23 23:39:40 SYSTEM OUTPUT CV-Sys Bot: 0.2v 0.6a 0w
 0265 06/23/23 23:39:40 SYSTEM OUTPUT CV-Sys Top: 0.2v 0.5a 0w
 0264 06/14/23 13:17:42 CONV SYSTEM ENERGIZED CV-Sys Reset Status Reg: 0x48
 0263 06/23/23 23:39:39 SYSTEM ENERGIZED CC-Sys Reset Status Reg: 0x48
 0262 06/23/23 22:48:54 SYSTEM DE-ENERGIZED CC-Sys
 0261 06/23/23 22:47:07 RUN END DATA CV-Sys Days To Next Exer: 1
 0260 06/23/23 22:47:07 RUN END DATA CV-Sys T: 654 741 17.8
 0259 06/23/23 22:47:07 RUN END DATA CV-Sys B: 646 762 16.7
 0258 06/23/23 22:47:07 RUN END DATA CV-Sys O: 1153 1282 # 3
 0257 06/23/23 22:47:07 RUN END DATA CV-Sys 7:34h 8.68kh 1147.81w
 0256 06/23/23 22:47:04 SYSTEM OUTPUT CV-Sys 18.8v 51.2c 52.9c
 0255 06/23/23 22:47:04 SYSTEM OUTPUT CV-Sys Min O/T/B: 839w 434w 418w
 0254 06/23/23 22:47:04 SYSTEM OUTPUT CV-Sys Max O/T/B: 1155w 669w 675w
 0253 06/23/23 22:47:04 SYSTEM OUTPUT CV-Sys Bot: 18.8v 25.2a 473w
 0252 06/23/23 22:47:04 SYSTEM OUTPUT CV-Sys Top: 18.8v 26.3a 498w
 0251 06/23/23 22:47:04 SYSTEM OUTPUT CV-Sys out: 50.3v 17.0a 854.4w
 0250 06/23/23 22:47:04 CONDITION STAGE END CV-Sys Health Chk V: 18.77
 0249 06/23/23 22:34:06 SYSTEM OUTPUT CV-Sys 17.9v 54.7c 56.9c
 0248 06/23/23 22:34:06 SYSTEM OUTPUT CV-Sys Min O/T/B: 1147w 629w 625w
 0247 06/23/23 22:34:06 SYSTEM OUTPUT CV-Sys Max O/T/B: 1181w 694w 681w
 0246 06/23/23 22:34:06 SYSTEM OUTPUT CV-Sys Bot: 17.9v 37.3a 668w
 0245 06/23/23 22:34:06 SYSTEM OUTPUT CV-Sys Top: 17.9v 36.6a 655w
 0244 06/23/23 22:34:06 SYSTEM OUTPUT CV-Sys out: 50.7v 22.8a 1155.2w
 0243 06/23/23 22:32:04 CONDITION STAGE END CV-Sys TopESR:0.0107
 BotESR:0.0108
 0242 06/23/23 22:32:04 CONDITION STAGE END CV-Sys TopAmp: 36.7 BotAmp: 36.4
 0241 06/23/23 22:32:04 CONDITION STAGE END CV-Sys TopPwr: 665 BotPwr: 661
 0240 06/23/23 22:32:04 CONDITION STAGE END CV-Sys TopMxP: 695 BotMxP: 681
 0239 06/23/23 22:32:04 CONDITION STAGE END CV-Sys SysOutP: 1174 ModV: 18.14
 0238 06/23/23 22:19:06 SYSTEM OUTPUT CV-Sys 18.2v 57.0c 56.7c
 0237 06/23/23 22:19:06 SYSTEM OUTPUT CV-Sys Min O/T/B: 1156w 634w 521w
 0236 06/23/23 22:19:06 SYSTEM OUTPUT CV-Sys Max O/T/B: 1180w 691w 683w
 0235 06/23/23 22:19:06 SYSTEM OUTPUT CV-Sys Bot: 18.2v 35.6a 647w
 0234 06/23/23 22:19:06 SYSTEM OUTPUT CV-Sys Top: 18.2v 36.7a 667w
 0233 06/23/23 22:19:06 SYSTEM OUTPUT CV-Sys out: 51.1v 23.0a 1174.4w
 0232 06/23/23 22:04:06 SYSTEM OUTPUT CV-Sys 17.9v 46.4c 46.7c
 0231 06/23/23 22:04:06 SYSTEM OUTPUT CV-Sys Min O/T/B: 1156w 637w 626w
 0230 06/23/23 22:04:06 SYSTEM OUTPUT CV-Sys Max O/T/B: 1181w 690w 685w
 0229 06/23/23 22:04:06 SYSTEM OUTPUT CV-Sys Bot: 17.9v 36.3a 648w
 0228 06/23/23 22:04:06 SYSTEM OUTPUT CV-Sys Top: 17.9v 38.2a 681w
 0227 06/23/23 22:04:06 SYSTEM OUTPUT CV-Sys out: 51.2v 23.0a 1177.2w
 0226 06/23/23 22:00:08 CONDITION STAGE END CV-Sys Lp: 5 CvInV: 0.0
 0225 06/23/23 21:49:06 SYSTEM OUTPUT CV-Sys 18.0v 55.4c 57.0c
 0224 06/23/23 21:49:06 SYSTEM OUTPUT CV-Sys Min O/T/B: 1156w 634w 618w
 0223 06/23/23 21:49:06 SYSTEM OUTPUT CV-Sys Max O/T/B: 1180w 694w 683w
 0222 06/23/23 21:49:06 SYSTEM OUTPUT CV-Sys Bot: 18.0v 37.8a 680w

0221 06/23/23 21:49:06 SYSTEM OUTPUT	CV-Sys Top: 18.0v 37.0a 666w
0220 06/23/23 21:49:06 SYSTEM OUTPUT	CV-Sys out: 51.2v 23.0a 1177.0w
0219 06/23/23 21:36:47 CONDITION STAGE END	CV-Sys Lp: 4 CvInV: 0.0
0218 06/23/23 21:34:06 SYSTEM OUTPUT	CV-Sys 17.9v 55.0c 57.1c
0217 06/23/23 21:34:06 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1157w 632w 480w
0216 06/23/23 21:34:06 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1181w 698w 679w
0215 06/23/23 21:34:06 SYSTEM OUTPUT	CV-Sys Bot: 17.9v 37.4a 669w
0214 06/23/23 21:34:06 SYSTEM OUTPUT	CV-Sys Top: 17.9v 37.7a 675w
0213 06/23/23 21:34:06 SYSTEM OUTPUT	CV-Sys out: 51.1v 23.0a 1174.5w
0212 06/23/23 21:19:06 SYSTEM OUTPUT	CV-Sys 17.9v 46.5c 46.6c
0211 06/23/23 21:19:06 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1156w 640w 599w
0210 06/23/23 21:19:06 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1180w 692w 683w
0209 06/23/23 21:19:06 SYSTEM OUTPUT	CV-Sys Bot: 17.9v 36.9a 658w
0208 06/23/23 21:19:06 SYSTEM OUTPUT	CV-Sys Top: 17.9v 37.9a 676w
0207 06/23/23 21:19:06 SYSTEM OUTPUT	CV-Sys out: 51.2v 23.0a 1176.9w
0206 06/23/23 21:13:26 CONDITION STAGE END	CV-Sys Lp: 3 CvInV: 0.0
0205 06/23/23 21:04:06 SYSTEM OUTPUT	CV-Sys 18.0v 55.1c 56.9c
0204 06/23/23 21:04:06 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1157w 638w 482w
0203 06/23/23 21:04:06 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1181w 702w 687w
0202 06/23/23 21:04:06 SYSTEM OUTPUT	CV-Sys Bot: 18.0v 35.8a 644w
0201 06/23/23 21:04:06 SYSTEM OUTPUT	CV-Sys Top: 18.0v 37.9a 683w
0200 06/23/23 21:04:06 SYSTEM OUTPUT	CV-Sys out: 50.6v 23.0a 1164.6w
0199 06/23/23 20:50:22 CONDITION STAGE END	CV-Sys Lp: 2 CvInV: 0.0
0198 06/23/23 20:49:06 SYSTEM OUTPUT	CV-Sys 17.9v 55.3c 57.1c
0197 06/23/23 20:49:06 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1157w 633w 621w
0196 06/23/23 20:49:06 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1181w 697w 687w
0195 06/23/23 20:49:06 SYSTEM OUTPUT	CV-Sys Bot: 17.9v 38.4a 687w
0194 06/23/23 20:49:06 SYSTEM OUTPUT	CV-Sys Top: 17.9v 37.2a 666w
0193 06/23/23 20:49:06 SYSTEM OUTPUT	CV-Sys out: 51.2v 23.0a 1176.6w
0192 06/23/23 20:34:06 SYSTEM OUTPUT	CV-Sys 18.0v 47.3c 46.7c
0191 06/23/23 20:34:06 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1157w 641w 631w
0190 06/23/23 20:34:06 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1248w 723w 713w
0189 06/23/23 20:34:06 SYSTEM OUTPUT	CV-Sys Bot: 18.0v 35.1a 632w
0188 06/23/23 20:34:06 SYSTEM OUTPUT	CV-Sys Top: 18.0v 37.9a 683w
0187 06/23/23 20:34:06 SYSTEM OUTPUT	CV-Sys out: 50.9v 23.0a 1172.4w
0186 06/23/23 20:26:53 CONDITION STAGE END	CV-Sys Lp: 1 CvInV: 0.0
0185 06/23/23 20:19:06 SYSTEM OUTPUT	CV-Sys 17.8v 57.7c 57.5c
0184 06/23/23 20:19:06 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
0183 06/23/23 20:19:06 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1283w 741w 761w
0182 06/23/23 20:19:06 SYSTEM OUTPUT	CV-Sys Bot: 17.8v 38.7a 688w
0181 06/23/23 20:19:06 SYSTEM OUTPUT	CV-Sys Top: 17.8v 39.5a 702w
0180 06/23/23 20:19:06 SYSTEM OUTPUT	CV-Sys out: 52.8v 23.7a 1248.4w
0179 06/23/23 20:04:06 CONDITION / HEALTH CHK	CV-Sys Sg:3 CSh:+0.021
FCMdV:17.90	
0178 06/23/23 20:04:03 START UP DATA	CV-Sys Top/Bot OCV: 22.95v 22.82v
0177 06/23/23 20:03:57 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
0176 06/23/23 20:03:56 START UP DATA	CV-Sys Alarms: 0000000000000000
0175 06/23/23 20:03:56 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
0174 06/23/23 20:03:56 START UP DATA	CV-Sys FID = CC:02.07.08
0173 06/23/23 20:03:56 START UP DATA	CV-Sys LVS= 50.0,2,52.5,34.9
0172 06/23/23 20:03:56 START UP DATA	CV-Sys 50.5v,N.A.p,2.96v,2.98v
0171 06/23/23 20:02:40 SYSTEM OUTPUT	CV-Sys Bot: 1.4v 0.3a 0w
0170 06/23/23 20:02:40 SYSTEM OUTPUT	CV-Sys Top: 0.4v 0.2a 0w

0169 06/23/23 19:47:40 SYSTEM OUTPUT	CV-Sys Bot: 0.5v 0.4a 0w
0168 06/23/23 19:47:40 SYSTEM OUTPUT	CV-Sys Top: 8.8v 0.2a 1w
0167 06/23/23 19:32:42 RUN END DATA	CV-Sys Days To Next Exer: 1
0166 06/23/23 19:32:42 RUN END DATA	CV-Sys T: 671 754 16.9
0165 06/23/23 19:32:42 RUN END DATA	CV-Sys B: 653 774 16.1
0164 06/23/23 19:32:42 RUN END DATA	CV-Sys O: 1177 1284 # 2
0163 06/23/23 19:32:42 RUN END DATA	CV-Sys 4:51h 5.55kh 1144.42w
0162 06/23/23 19:32:40 SYSTEM OUTPUT	CV-Sys 18.0v 55.8c 56.9c
0161 06/23/23 19:32:40 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1158w 642w 624w
0160 06/23/23 19:32:40 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1180w 693w 677w
0159 06/23/23 19:32:40 SYSTEM OUTPUT	CV-Sys Bot: 18.0v 36.3a 653w
0158 06/23/23 19:32:40 SYSTEM OUTPUT	CV-Sys Top: 18.0v 37.9a 680w
0157 06/23/23 19:32:40 SYSTEM OUTPUT	CV-Sys out: 51.1v 23.0a 1177.5w
0156 06/23/23 19:32:40 CONDITION STAGE END	CV-Sys TopESR:0.0106
BotESR:0.0108	
0155 06/23/23 19:32:40 CONDITION STAGE END	CV-Sys TopAmp: 36.9 BotAmp: 36.1
0154 06/23/23 19:32:40 CONDITION STAGE END	CV-Sys TopPwr: 669 BotPwr: 655
0153 06/23/23 19:32:40 CONDITION STAGE END	CV-Sys TopMxP: 694 BotMxP: 682
0152 06/23/23 19:32:40 CONDITION STAGE END	CV-Sys SysOutP: 1175 ModV: 18.13
0151 06/23/23 19:25:46 SYSTEM OUTPUT	CV-Sys 18.0v 56.3c 56.9c
0150 06/23/23 19:25:46 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1157w 642w 623w
0149 06/23/23 19:25:46 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1180w 694w 681w
0148 06/23/23 19:25:46 SYSTEM OUTPUT	CV-Sys Bot: 17.9v 36.9a 662w
0147 06/23/23 19:25:46 SYSTEM OUTPUT	CV-Sys Top: 18.0v 37.4a 671w
0146 06/23/23 19:25:46 SYSTEM OUTPUT	CV-Sys out: 51.1v 23.0a 1177.3w
0145 06/23/23 19:10:46 SYSTEM OUTPUT	CV-Sys 18.1v 54.7c 46.8c
0144 06/23/23 19:10:46 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1158w 640w 626w
0143 06/23/23 19:10:46 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1181w 694w 681w
0142 06/23/23 19:10:46 SYSTEM OUTPUT	CV-Sys Bot: 18.1v 35.5a 643w
0141 06/23/23 19:10:46 SYSTEM OUTPUT	CV-Sys Top: 18.1v 36.8a 667w
0140 06/23/23 19:10:46 SYSTEM OUTPUT	CV-Sys out: 50.8v 23.0a 1169.0w
0139 06/23/23 18:55:46 SYSTEM OUTPUT	CV-Sys 17.9v 56.4c 56.9c
0138 06/23/23 18:55:46 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1158w 639w 626w
0137 06/23/23 18:55:46 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1180w 697w 675w
0136 06/23/23 18:55:46 SYSTEM OUTPUT	CV-Sys Bot: 17.9v 35.6a 639w
0135 06/23/23 18:55:46 SYSTEM OUTPUT	CV-Sys Top: 18.0v 38.3a 687w
0134 06/23/23 18:55:46 SYSTEM OUTPUT	CV-Sys out: 51.2v 23.0a 1178.1w
0133 06/23/23 18:40:46 SYSTEM OUTPUT	CV-Sys 18.1v 57.0c 56.7c
0132 06/23/23 18:40:46 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1157w 642w 622w
0131 06/23/23 18:40:46 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1180w 699w 677w
0130 06/23/23 18:40:46 SYSTEM OUTPUT	CV-Sys Bot: 18.1v 36.8a 666w
0129 06/23/23 18:40:46 SYSTEM OUTPUT	CV-Sys Top: 18.1v 35.5a 642w
0128 06/23/23 18:40:46 SYSTEM OUTPUT	CV-Sys out: 51.0v 23.0a 1174.9w
0127 06/23/23 18:25:46 SYSTEM OUTPUT	CV-Sys 17.8v 55.2c 57.2c
0126 06/23/23 18:25:46 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1157w 638w 620w
0125 06/23/23 18:25:46 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1182w 698w 680w
0124 06/23/23 18:25:46 SYSTEM OUTPUT	CV-Sys Bot: 17.8v 37.5a 668w
0123 06/23/23 18:25:46 SYSTEM OUTPUT	CV-Sys Top: 17.8v 38.3a 682w
0122 06/23/23 18:25:46 SYSTEM OUTPUT	CV-Sys out: 51.2v 23.0a 1178.2w
0121 06/23/23 18:10:46 SYSTEM OUTPUT	CV-Sys 17.9v 55.7c 56.9c
0120 06/23/23 18:10:46 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1157w 632w 619w
0119 06/23/23 18:10:46 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1180w 698w 677w
0118 06/23/23 18:10:46 SYSTEM OUTPUT	CV-Sys Bot: 17.9v 36.4a 653w

0117 06/23/23 18:10:46 SYSTEM OUTPUT	CV-Sys Top: 17.9v 37.9a 679w
0116 06/23/23 18:10:46 SYSTEM OUTPUT	CV-Sys out: 51.1v 23.0a 1176.6w
0115 06/23/23 17:55:46 SYSTEM OUTPUT	CV-Sys 17.9v 47.6c 46.9c
0114 06/23/23 17:55:46 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1157w 642w 623w
0113 06/23/23 17:55:46 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1181w 697w 678w
0112 06/23/23 17:55:46 SYSTEM OUTPUT	CV-Sys Bot: 17.9v 35.1a 629w
0111 06/23/23 17:55:46 SYSTEM OUTPUT	CV-Sys Top: 17.9v 37.8a 677w
0110 06/23/23 17:55:46 SYSTEM OUTPUT	CV-Sys out: 51.0v 23.0a 1175.7w
0109 06/23/23 17:40:46 SYSTEM OUTPUT	CV-Sys 18.0v 57.1c 56.8c
0108 06/23/23 17:40:46 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1158w 635w 613w
0107 06/23/23 17:40:46 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1181w 704w 675w
0106 06/23/23 17:40:46 SYSTEM OUTPUT	CV-Sys Bot: 18.0v 37.2a 668w
0105 06/23/23 17:40:46 SYSTEM OUTPUT	CV-Sys Top: 18.0v 36.3a 650w
0104 06/23/23 17:40:46 SYSTEM OUTPUT	CV-Sys out: 51.1v 23.0a 1177.5w
0103 06/23/23 17:25:46 SYSTEM OUTPUT	CV-Sys 17.8v 46.7c 46.8c
0102 06/23/23 17:25:46 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1157w 640w 624w
0101 06/23/23 17:25:46 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1251w 732w 712w
0100 06/23/23 17:25:46 SYSTEM OUTPUT	CV-Sys Bot: 17.8v 36.5a 650w
0099 06/23/23 17:25:46 SYSTEM OUTPUT	CV-Sys Top: 17.8v 37.0a 659w
0098 06/23/23 17:25:46 SYSTEM OUTPUT	CV-Sys out: 50.6v 23.0a 1165.9w
0097 06/23/23 17:10:46 SYSTEM OUTPUT	CV-Sys 17.6v 57.6c 57.6c
0096 06/23/23 17:10:46 SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
0095 06/23/23 17:10:46 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1284w 753w 773w
0094 06/23/23 17:10:46 SYSTEM OUTPUT	CV-Sys Bot: 17.6v 38.5a 677w
0093 06/23/23 17:10:46 SYSTEM OUTPUT	CV-Sys Top: 17.6v 40.4a 710w
0092 06/23/23 17:10:46 SYSTEM OUTPUT	CV-Sys out: 52.8v 23.7a 1250.9w
0091 06/23/23 16:55:46 CONDITION / HEALTH CHK CV-Sys Sg:2 CSh:+0.021	
FCMdV:17.90	
0090 06/23/23 16:55:43 START UP DATA	CV-Sys Top/Bot OCV: 22.88v 22.76v
0089 06/23/23 16:55:37 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
0088 06/23/23 16:55:37 START UP DATA	CV-Sys Alarms: 0000000000000000
0087 06/23/23 16:55:37 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
0086 06/23/23 16:55:37 START UP DATA	CV-Sys FID = CC:02.07.08
0085 06/23/23 16:55:37 START UP DATA	CV-Sys LVS= 50.0,2,52.5,35.8
0084 06/23/23 16:55:37 START UP DATA	CV-Sys 50.5v,N.A.p,2.95v,2.97v
0083 06/23/23 16:54:21 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.4a 0w
0082 06/23/23 16:54:21 SYSTEM OUTPUT	CV-Sys Top: 0.4v 0.2a 0w
0081 06/23/23 16:39:21 SYSTEM OUTPUT	CV-Sys Bot: 0.5v 0.4a 0w
0080 06/23/23 16:39:21 SYSTEM OUTPUT	CV-Sys Top: 7.4v 0.3a 2w
0079 06/23/23 16:24:23 RUN END DATA	CV-Sys Days To Next Exer: 1
0078 06/23/23 16:24:23 RUN END DATA	CV-Sys T: 638 725 15.6
0077 06/23/23 16:24:23 RUN END DATA	CV-Sys B: 610 727 15.6
0076 06/23/23 16:24:23 RUN END DATA	CV-Sys O: 1106 1232 # 1
0075 06/23/23 16:24:23 RUN END DATA	CV-Sys 2:14h 2.47kh 1105.84w
0074 06/23/23 16:24:21 SYSTEM OUTPUT	CV-Sys 17.9v 55.9c 56.9c
0073 06/23/23 16:24:21 SYSTEM OUTPUT	CV-Sys Min O/T/B: 1158w 645w 593w
0072 06/23/23 16:24:21 SYSTEM OUTPUT	CV-Sys Max O/T/B: 1180w 708w 672w
0071 06/23/23 16:24:20 SYSTEM OUTPUT	CV-Sys Bot: 17.9v 35.7a 641w
0070 06/23/23 16:24:20 SYSTEM OUTPUT	CV-Sys Top: 18.0v 37.9a 692w
0069 06/23/23 16:24:20 SYSTEM OUTPUT	CV-Sys out: 51.1v 23.0a 1175.9w
0068 06/23/23 16:24:20 CONDITION STAGE END	CV-Sys TopESR:0.0106
BotESR:0.0110	
0067 06/23/23 16:24:20 CONDITION STAGE END	CV-Sys TopAmp: 37.8 BotAmp: 36.2

0066 06/23/23 16:24:20 CONDITION STAGE END CV-Sys TopPwr: 677 BotPwr: 647
 0065 06/23/23 16:24:20 CONDITION STAGE END CV-Sys TopMxP: 709 BotMxP: 672
 0064 06/23/23 16:24:20 CONDITION STAGE END CV-Sys SysOutP: 1174 ModV: 17.89
 0063 06/23/23 16:10:07 SYSTEM OUTPUT CV-Sys 17.6v 48.5c 57.3c
 0062 06/23/23 16:10:07 SYSTEM OUTPUT CV-Sys Min O/T/B: 1157w 647w 535w
 0061 06/23/23 16:10:07 SYSTEM OUTPUT CV-Sys Max O/T/B: 1181w 712w 672w
 0060 06/23/23 16:10:07 SYSTEM OUTPUT CV-Sys Bot: 17.6v 37.6a 660w
 0059 06/23/23 16:10:07 SYSTEM OUTPUT CV-Sys Top: 17.6v 39.0a 685w
 0058 06/23/23 16:10:07 SYSTEM OUTPUT CV-Sys out: 51.1v 23.0a 1176.7w
 0057 06/23/23 15:55:07 SYSTEM OUTPUT CV-Sys 17.5v 55.6c 57.3c
 0056 06/23/23 15:55:07 SYSTEM OUTPUT CV-Sys Min O/T/B: 1157w 642w 610w
 0055 06/23/23 15:55:07 SYSTEM OUTPUT CV-Sys Max O/T/B: 1180w 710w 674w
 0054 06/23/23 15:55:07 SYSTEM OUTPUT CV-Sys Bot: 17.5v 38.5a 672w
 0053 06/23/23 15:55:07 SYSTEM OUTPUT CV-Sys Top: 17.5v 38.7a 675w
 0052 06/23/23 15:55:07 SYSTEM OUTPUT CV-Sys out: 50.8v 23.0a 1170.3w
 0051 06/23/23 15:40:07 SYSTEM OUTPUT CV-Sys 17.6v 56.2c 46.9c
 0050 06/23/23 15:40:07 SYSTEM OUTPUT CV-Sys Min O/T/B: 1156w 646w 603w
 0049 06/23/23 15:40:07 SYSTEM OUTPUT CV-Sys Max O/T/B: 1180w 713w 676w
 0048 06/23/23 15:40:07 SYSTEM OUTPUT CV-Sys Bot: 17.6v 35.5a 624w
 0047 06/23/23 15:40:07 SYSTEM OUTPUT CV-Sys Top: 17.6v 39.6a 695w
 0046 06/23/23 15:40:07 SYSTEM OUTPUT CV-Sys out: 51.1v 23.0a 1177.5w
 0045 06/23/23 15:25:07 SYSTEM OUTPUT CV-Sys 17.5v 48.1c 57.2c
 0044 06/23/23 15:25:07 SYSTEM OUTPUT CV-Sys Min O/T/B: 1157w 643w 486w
 0043 06/23/23 15:25:07 SYSTEM OUTPUT CV-Sys Max O/T/B: 1181w 716w 675w
 0042 06/23/23 15:25:07 SYSTEM OUTPUT CV-Sys Bot: 17.5v 38.1a 667w
 0041 06/23/23 15:25:07 SYSTEM OUTPUT CV-Sys Top: 17.5v 38.2a 668w
 0040 06/23/23 15:25:07 SYSTEM OUTPUT CV-Sys out: 50.7v 23.0a 1167.5w
 0039 06/23/23 15:10:07 SYSTEM OUTPUT CV-Sys 17.2v 55.9c 57.4c
 0038 06/23/23 15:10:07 SYSTEM OUTPUT CV-Sys Min O/T/B: 1157w 639w 509w
 0037 06/23/23 15:10:07 SYSTEM OUTPUT CV-Sys Max O/T/B: 1181w 716w 676w
 0036 06/23/23 15:10:07 SYSTEM OUTPUT CV-Sys Bot: 17.2v 38.4a 658w
 0035 06/23/23 15:10:07 SYSTEM OUTPUT CV-Sys Top: 17.2v 39.5a 678w
 0034 06/23/23 15:10:07 SYSTEM OUTPUT CV-Sys out: 51.1v 23.0a 1177.3w
 0033 06/23/23 14:55:07 SYSTEM OUTPUT CV-Sys 17.2v 55.8c 47.6c
 0032 06/23/23 14:55:07 SYSTEM OUTPUT CV-Sys Min O/T/B: 1155w 640w 602w
 0031 06/23/23 14:55:07 SYSTEM OUTPUT CV-Sys Max O/T/B: 1181w 720w 685w
 0030 06/23/23 14:55:07 SYSTEM OUTPUT CV-Sys Bot: 17.2v 36.9a 633w
 0029 06/23/23 14:55:07 SYSTEM OUTPUT CV-Sys Top: 17.2v 41.0a 704w
 0028 06/23/23 14:55:07 SYSTEM OUTPUT CV-Sys out: 50.9v 23.0a 1171.2w
 0027 06/23/23 14:40:07 SYSTEM OUTPUT CV-Sys 15.9v 47.9c 58.3c
 0026 06/23/23 14:40:07 SYSTEM OUTPUT CV-Sys Min O/T/B: 713w 386w 380w
 0025 06/23/23 14:40:07 SYSTEM OUTPUT CV-Sys Max O/T/B: 1240w 724w 727w
 0024 06/23/23 14:40:07 SYSTEM OUTPUT CV-Sys Bot: 15.9v 39.8a 631w
 0023 06/23/23 14:40:07 SYSTEM OUTPUT CV-Sys Top: 15.9v 43.9a 696w
 0022 06/23/23 14:40:07 SYSTEM OUTPUT CV-Sys out: 51.1v 23.1a 1178.9w
 0021 06/23/23 14:25:07 SYSTEM OUTPUT CV-Sys 17.6v 51.6c 51.8c
 0020 06/23/23 14:25:07 SYSTEM OUTPUT CV-Sys Min O/T/B: 0w 0w 0w
 0019 06/23/23 14:25:07 SYSTEM OUTPUT CV-Sys Max O/T/B: 736w 467w 458w
 0018 06/23/23 14:25:07 SYSTEM OUTPUT CV-Sys Bot: 17.6v 25.1a 442w
 0017 06/23/23 14:25:07 SYSTEM OUTPUT CV-Sys Top: 17.6v 22.2a 391w
 0016 06/23/23 14:25:07 SYSTEM OUTPUT CV-Sys out: 52.7v 13.8a 729.5w
 0015 06/23/23 14:10:07 CONDITION / HEALTH CHK CV-Sys Sg:1 CSh:+0.021
 FCMdV:17.90

0014 06/23/23 14:10:04 START UP DATA	CV-Sys Top/Bot OCV: 24.38v 23.65v
0013 06/23/23 14:09:58 SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
0012 06/23/23 14:09:44 START UP DATA	CV-Sys Alarms: 0000000000000000
0011 06/23/23 14:09:44 START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
0010 06/23/23 14:09:44 START UP DATA	CV-Sys FID = CC:02.07.08
0009 06/23/23 14:09:44 START UP DATA	CV-Sys LVS= 50.0,2,52.5,25.3
0008 06/23/23 14:09:44 START UP DATA	CV-Sys 50.5v,N.A.p,2.57v,2.57v
0007 06/23/23 14:09:44 REMOTE START	E-Bus Condition SN: PPS23249002
0006 06/23/23 14:09:33 SYSTEM OUTPUT	CV-Sys Bot: 0.2v 0.4a 0w
0005 06/23/23 14:09:33 SYSTEM OUTPUT	CV-Sys Top: 0.2v 0.2a 0w
0004 06/14/23 13:17:42 CONV SYSTEM ENERGIZED	CV-Sys Reset Status Reg: 0x48
0003 06/23/23 14:09:32 SYSTEM ENERGIZED	CC-Sys Reset Status Reg: 0x48
0002 06/23/23 09:03:37 SYSTEM DE-ENERGIZED	CC-Sys
0001 06/23/23 09:03:37 EVENT LOG ERASED	E-Bus

From: [Shima Nazari](#)
To: [David Lowe](#)
Cc: [Mike Smith](#); [Zach Hoiting](#); [David Andrew Torick](#); [Julia M Melle](#)
Subject: Re: Western Systems, Inc. HyMax™ [WESS-5-0001]
Date: Thursday, February 8, 2024 9:34:09 AM
Attachments: [EQASI Hymax Report DRAFT.pdf](#)
[4025 Final Report-95%.pdf](#)
[Testing Procedure.pdf](#)

Dear Mr. Lowe,

We are writing in response to your letter of December 15th, 2023, raising allegations regarding our testing and the final report we are preparing related to the evaluation of HyMax System. We would like to clarify that although UC has no obligation to consider or include in its final report any “rebuttal” to its independent research, as a courtesy to Western Systems, UC is willing to include a response from Western Systems in UC’s final report to Caltrans. Our final report is currently scheduled to be submitted on April 10th, 2024. In the meantime, we have attached to this email the followings:

1. Our draft 95% final report,
2. A draft copy of the METS EQASI report
3. The test procedure METS EQASI used

We feel compelled to address the allegations and implications raised in Western Systems’ letter of December 15, 2023. As described below, UC finds that Western Systems’ letter includes several unfounded statements and erroneous conclusions, which either ignore or obfuscate important facts concerning the design and implementation of our study.

First, your letter improperly suggests that Caltrans or UC Davis may have incorrectly installed the Western Systems equipment that was evaluated. As Western Systems knows, neither Caltrans nor UC Davis set up the equipment; nor did they set or modify any of the parameters using the GUI. Either your client (Western Systems) or a 3rd party (e.g. a contractor) hired by your client performed these operations. UC had no responsibility in setting up this system, this was done completely by your client, or a 3rd party used by your client.

Second, we address the bullet points in your letter one by one as follows:

- a. *Allegation: UCD failed to specify setup/test plans/procedures to fully test the system functionality in its intended operating environment and application, including wire/plumbing to hydrogen storage.*

Response: Western Systems should review the test plan and draft final report attached to this email. As UC stated in the report that was previously provided, Western Systems or their contractors performed the setup and commissioning. Also, UC Davis on numerous occasions inquired about wire/plumbing diagrams for the HyMax system and was never provided with these documents.

- b. *Allegation: UCD failed to specify initial system set-up via internal GUI screens for modes of operation, set points for low fuel, set points for low voltage threshold, set points for dormancy refresh cycles, low fuel, out of fuel alarms, H2 leak alarm level, etc.*

Response: Contrary to this allegation, Western Systems delivered and set

up the system for testing and evaluation and was involved in ongoing calibration of the equipment and alarms throughout the research. As part of that process, Western Systems established these set-points and also modified these set-points over time to try to prevent activating the system alarms.

- c. ***Allegation:** UCD failed to confirm adherence to HyMax engineering specifications, spec cut sheets, and a high-level test plan provided by Western well in advance of METS lab testing. This is demonstrated in part by the diagnostic logs from the Plug unit, enclosed, which the Caltrans MET lab had in its possession for the testing and evaluation, which identifies the misuse of the equipment during testing procedures.*

Response: We have reviewed our records and have been unable to identify any emails or written correspondence from Western Systems related to these documents prior to initiating the testing. UC requests that Western Systems clarify how and when these items were communicated to UC. The only related document that Western Systems sent to UC Davis was the spec cut sheet. However, this document was emailed to us in August due to another concern which was raised during testing. Just last month, UC Davis received copies of some of the mentioned documents from METS.

- d. UC also disputes Western Systems' claim that UC misused the equipment by frequently restarting the system. In fact, the frequent restarting of the HyMax system was performed either by Western Systems (and its 3rd party contractor) or by METS based on Western Systems directions on multiple occasions during testing. Western Systems told METS to restart the system when hydrogen leak warnings stopped the system from functioning as a source of alternative power.
- e. ***Allegation:** UCD failed to disclose the system parameters and test conditions leading to what it called the “electrically catastrophic failure” that allegedly occurred.*

Response: In our final report, attached hereto, we have clarified that we ended the research “when the second unit or system was unable to restart” (please see pages iii, 2, 11, and 15). We also indicated that “we were unable to determine if the failures of the HyMax System were as a result of Western Systems or their contractor’s set up and commissioning or if the failures were due to the HFC”.

- f. ***Allegation:** Despite claiming multiple performance issues, UCD failed to provide detailed documentation/information of what caused that failure or the operations conditions leading to the alleged failure.*

Response: The test procedure followed by METS and their Report on evaluation of the HyMax system that includes additional details such as startup procedure, test plan, and list of alarms are attached to this email. We should highlight that in the provided test plan only scenario 1 was attempted for evaluation of the HyMax system.

- g. **Allegation:** *UCD failed to provide the technical qualifications for the individuals involved during each testing procedure.*
- h. **Response:** The tests were performed by Materials Engineering & Testing Services Electrical Quality Assurance & Source Inspection of Caltrans (in this email referred to as METS) under the supervision and guidance by Western Systems or their Contractor. Please see the METS report for more information.
- i. **Allegation:** *UCD fails to explain how it purports to have prepared the Report, yet Caltrans apparently performed HyMax testing. If that is the case, where is the contemporaneous supporting documentation from Caltrans, which has been requested by Western but not produced? UCD has failed to provide for Western's review Appendix D: METS EQASI QASI Hyrax Report.*
- j. **Response:** Caltrans METS performed the testing under supervision of representative of Western Systems. There seems to be a concern that the highest load applied to the system was outside of the recommendations. However, the value reported in the final report is the actual output of the HyMax system, which is within the advertised power range of the system. Please review the METS report attached to this email.

UC notes that the phrase “catastrophic failure” is a technical term used by METS for system failures after which the system cannot be restarted. In the second draft of the final report, attached to this email, we changed the terminology as discussed in response in item 2e. Furthermore, we acknowledged that the problems raised during testing could be rooted in system setup and commissioning and not necessarily the HFC design. These changes are in the spirit of our strong support for green and sustainable technologies, and we hope that they will address some of your clients concerns.

Finally, it is also important to note that UC Davis had no obligation, scientific or contractual, to consider results or operating success of Western System field installations for other municipalities. Such evaluations were not part of the UC Davis research contract. Nor is UC Davis aware of any scientific data from those other installations, so it would be inappropriate to refer to those in its report. Although UC Davis disagrees with Western System’s concern that the research performed was “catastrophically flawed,” or otherwise incomplete or not thoroughly reported scientifically, UC Davis acknowledges that disputes in science are common and necessary. Indeed, discussing contrary findings in the context of new or different evidence is the cornerstone of good science. However, if Western System’s primary objection to submission of our final report and publication of the results is a disagreement with the integrity of the research therein, UC Davis reminds Western Systems that any person, including Western Systems, is free to publicly dispute the research published by UC Davis investigators. Accordingly, Western Systems is welcome to publicly refute UC Davis’s results with Western’s own evidence and a non-libelous approach that does not threaten unproductive legal action because of scientific disagreements.

Please inform your client to send their response, backed by factual and correct data,

to us within 60 days of this email. Please be informed that UC Davis will submit its final report to Caltrans on April 10th, 2024, regardless of whether UC Davis receives any response or rebuttal from Western Systems.

Shima Nazari

Assistant Professor, Department of Mechanical and Aerospace Engineering
University of California, Davis

TEL: +1.530.752.5801

E-mail: snazari@ucdavis.edu

From: David Lowe <lowe@lowegrahamjones.com>

Date: Friday, December 15, 2023 at 3:55 PM

To: Shima Nazari <snazari@ucdavis.edu>, Dave Torick <datorick@ucdavis.edu>

Cc: Mike Smith <Mike@advancedtraffic.com>, Zach Hoiting
<zhoiting@westernsystems-inc.com>

Subject: Western Systems, Inc. HyMax™ [WESS-5-0001]

Please see attached letter.

David A. Lowe
LOWE GRAHAM JONES
1325 Fourth Avenue, Suite 1130 - Seattle, Washington 98101
206.381.3300 Fax: 206.381.3301 LoweGrahamJones.com
DD: 206.381.3303 Cell: 206.335.3303 Lowe@LoweGrahamJones.com

Information in this email message may be privileged, confidential and protected from disclosure. If received in error, please respond and destroy all copies.

Appendix B:

METS EQASI HyMax Report

EQASI Hymax Report



23 October 2023

Subject

Hymax Hydrogen Fuel Cell System "HFCS" Battery Back-Up Alternative

Project Information

Location: Translab, 5900 Folsom Blvd, Sacramento CA 95831

Problem Statement: Caltrans battery backup systems are limited in runtime. Recent and more frequent power outages have created a need for longer sustained backup power. Public safety, particularly at intersections adjacent to schools and high traffic volume safe sensitive intersections, would benefit from an extended run time. In addition, maintenance staff would have additional time to respond to rural areas that are most frequently subject to power outages.

Scope of Work: Materials Engineering & Testing Services Electrical Quality Assurance & Source Inspection (METS EQASI) performs Quality Assurance of the Hymax Hydrogen Fuel Cell System against testing criteria developed by EQASI, The Division of Research Innovation and System Information (DRISI), and UC Davis. A lab report of the findings will be developed and published by the branch.

Background

The EQASI branch of METS supports Caltrans' responsibility to ensure Contractor Furnished Material (CFM) meets Caltrans Standards along with material requirements specified in Project Special Provisions. EQASI also performs Source Inspection and Quality Control Audits at manufacturers' facilities assuring compliance with Caltrans Standards.

The EQASI Innovation Team is tasked with establishing and implementing procedures for testing and evaluating new products submitted for approval through the New Product Evaluation Program (NPEP).

This report specifically details testing and findings by EQASI on the Hymax Hydrogen Fuel Cell System supplied by Western Systems, referred to in the

balance of this report as “HFCS”. This system was intended to be installed at three locations selected by DRISI and UC Davis. At the start of this project, UC Davis was contracted with DRISI to provide data collection and analysis once the units had been installed. On December 15, 2022, EQASI partnered with DRISI and UC Davis to provide pre-installation Quality Assurance (QA) on the Hymax HFCS.

EQASI, UC Davis, DRISI, and Western Systems agreed to ship the first production unit for the DRISI project’s quality assurance testing and evaluation. Testing was to be performed by METS EQASI prior to deployment.

Objective

The current BBS system used by Caltrans is a BBS cabinet type E or LX mounted onto the side of a 332LS cabinet or 342LS cabinet containing four 12V absorbent glass mat batteries, a switch control, and inverter. This system generates enough energy for roughly 4 hours of continued run time in full signal operation after utility power is lost based on a poll of Caltrans District Maintenance groups. Aside from the limited run time, some of these cabinets are in remote locations subject to extended utility power outages.



Current BBS Cabinet and Configuration

The HFCs is intended to extend runtime utilizing an alternative fuel source. The HFCs uses a 332-stretch cabinet with six tanks of 99.95% hydrogen gas, providing fuel to a fuel cell mounted on the side of the cabinet. The fuel cell converts hydrogen gas with an external air flow into 48VDC to provide power to an inverter. Based on Appendix 1 of the Operators Manual from Plug Power, the run time from six fuel tanks at 2500 PSI for a 500-watt load is listed as 93 hours. The HFCs requires a complete BBS system to provide energy in a usable 120V AC form. The exterior access panel contains a port for refueling and a primary shut-off valve. This system allows for continuous back-up power and can run while being refueled.

The HFCs does not replace the Standard BBS but may be considered as an option at site specific locations where extended run time is deemed critical to public safety, and provide maintenance personnel additional time to respond if needed.

EQASI understands that hydrogen is a dangerous gas to conduct work around. EQASI continues to maintain a safe work environment by purchasing tools such as a RIGID micro CD-100, which detects hydrogen gas leaks. As EQASI planned the testing procedures, there were fire hazard concerns with testing this material in a laboratory environment. EQASI properly labeled the HFCS with the provided hazardous material diamond labeling for fire and safety personnel. EQASI ensured proper ventilation during testing in case there was an unexpected failure. EQASI placed signage on the outside of the unit notifying individuals to not touch the unit and to maintain a safe distance as it was being tested.

Initial Start up Reports

On March 23, 2023 Western Systems attempted the initial start-up of the HFCS. Upon opening the valves from the Hydrogen tanks, a loud pressure-release noise and a burst of gas was expelled (see Incident Report Appendix A). The findings were that the main inlet line from the exterior fueling panel to the manifold were not seated properly. The two reasons for this that were noted include: 1) the overall length of the line was too long, 2) the ferrule was not properly installed (see Photo Exhibit 1).



Photo Exhibit 1

Photo Exhibit 2 shows the inlet line with one side properly seated ferrule and the failed ferrule on the other. The line noted in reason 1 was replaced with a

different line. **EQASI determined at this point that proper quality control or factory testing had not been performed prior to shipping.**

DRAFT

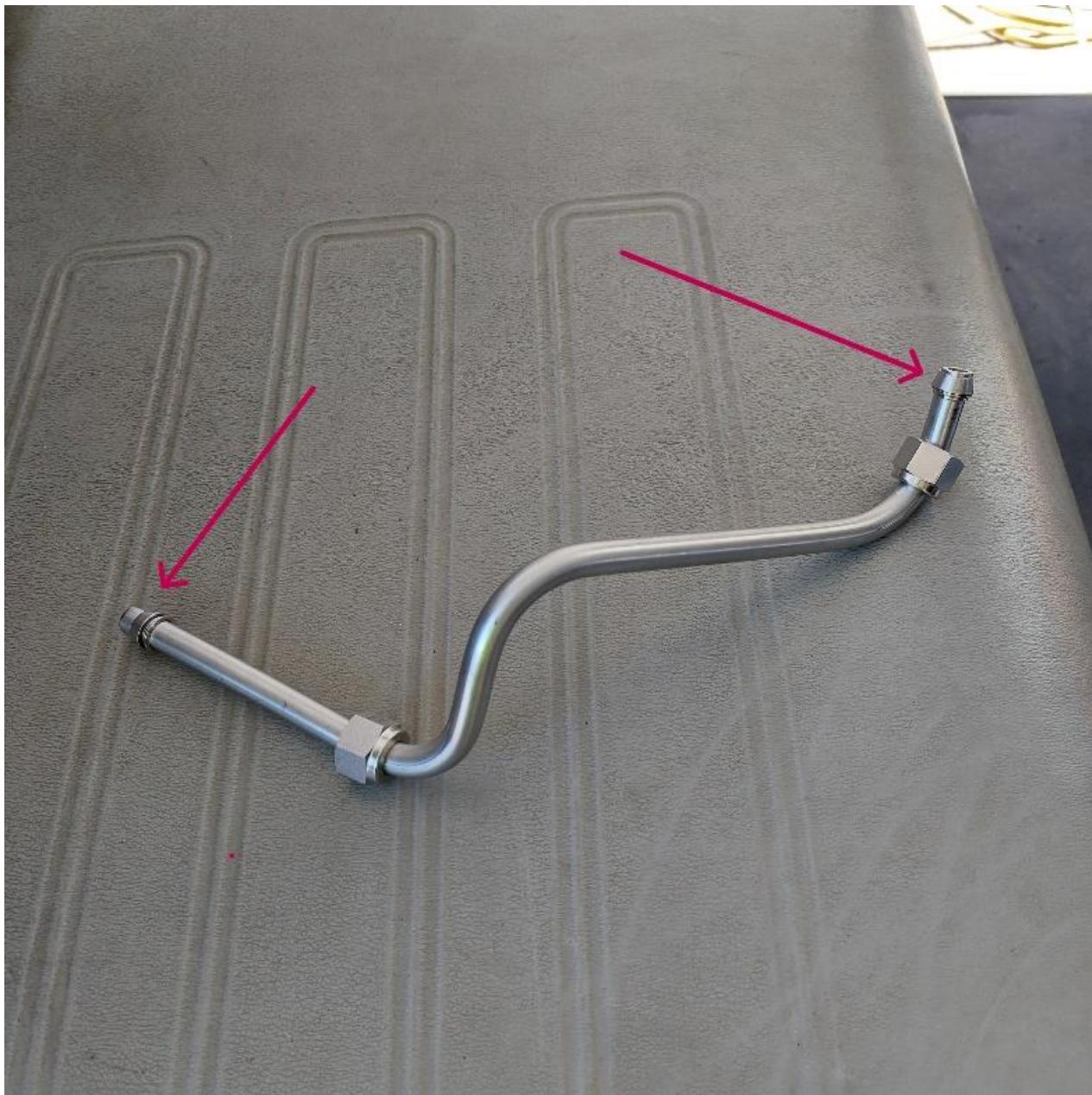


Photo Exhibit 2

Due to safety concerns, EQASI requested Western Systems provide a startup procedure for the HFCS. Western Systems complied with EQASI's requirement and provided a start-up procedure document (see appendix A). On May 30, 2023, Western Systems provided a trained hydrogen fueling and Start-up technician from GTL Leasing. GTL's technician's attempts to start the unit were unsuccessful. At this point, the inlet line was discovered to be too long and would not seat properly. Western Systems had internal discussions and arranged to provide a new piping manifold, however, later settled on providing a new inlet line to be installed by Craig Van Pelt.

Upon resolving the leak issues, multiple failed attempts were made by Western Systems to start the HFCS. The low-pressure solenoid failed to open. The solenoid was replaced and again failed to open. **Western Systems reached out to the Plug Power Technical Support regarding this issue and received little assistance.** The determination was finally made that the Plug Power engine was not sending the proper voltage to the solenoid and the fuel cell would be replaced.

On July 18, 2023, the Plug Power fuel cell was replaced and the HFCS was determined to be ready for testing. **The engine failure demonstrated that proper QC and factory testing had not occurred.**

Test Procedure

The test plan for the HFCS was created and submitted to EQASI by the UC Davis Advanced Highway Maintenance and Construction Technology (AHMCT) Research Center for concurrence and implementation (see Appendix B).

EQASI created a template for documentation and reference using the UC Davis Test Plan (see Appendix C).

In addition, the State Fire Marshall was consulted and provided comments (see Appendix D).

Results

The HFCS was unable to complete testing due to a catastrophic failure on September 6, 2023 (see report Appendix E). The failures prior to September 6, 2023, were different alarms prior to the catastrophic failure.

The testing conducted from July 18, 2023, to September 6, 2023, was continuously interrupted by alarms highlighted in Appendix F.

The test data that was collected is shown in Appendix G. The unit was run for 14 days at the Translab, however, during 12 of those days, the unit produced faults or alarms.

Analysis

Based on the catastrophic failure on September 6, 2023, the HFCS was deemed non-functional, and testing was ceased.

Western System, DRISI and UC Davis were notified via e-mail of the results, the catastrophic failure, and EQASI's decision to cease testing (see Appendix E).

Conclusion

In the meeting that took place on September 12, 2023, Western Systems (the HFCS supplier) freely admitted that the system delivered to EQASI was rushed to

production and shipped for testing to meet deadlines in place for their contract with DRISI and UC Davis. The results captured above illustrate a lack of proper Quality Control and factory testing.

Based on the growth of Hydrogen Technology and Production, a Hydrogen Fuel Cell System could still be considered a solution to Caltrans' need for extended run time. EQASI would suggest third party testing to be performed, a facility QC audit be conducted, and trained personnel be provided for startup and training prior to testing another Hymax HFCS system.

Acknowledgements

The EQASI staff appreciates the opportunity to partner with DRISI and UC Davis on this evaluation.

The partnering and lab testing performed on this project saved many hours of labor and ensured the safety of Caltrans personnel and the travelling public. The lab testing provided valuable insight into the deployment readiness of the tested units without spending limited District resources. EQASI takes pride in our role in new product evaluations and look forward to maintaining and developing relationships with our partners.

Appendices:

Appendix A: Startup Procedure

HyMax Pre-commissioning checklist BETA

NOTE: All items marked with “*” to be performed by a qualified individual trained in hydrogen handling and systems.

A) Initial visual inspection:

- 1- Visual inspection verifying cylinder cabinet is bolted securely to concrete pad per install guidelines.
- 2- Visual inspection to confirm required clearances around the cabinets.
- 3- Visual inspection to verify Hydrogen HAZMAT Diamond sticker was placed on the cylinder cabinet, along with Hydrogen Warning sticker and Western Systems factory QC sticker.
- 4- Open all cabinet doors. Complete a visual inspection and remove any evidence of insects/rodents. Check for damaged /frayed wiring.
- 5- Visual inspection to verify electrical connections are correct per Plug Power and Alpha manuals.
- 6- Check all manifold connections and fittings visually/Hand tight at high and low-pressure sides and pressure gauges.
- 7- Check cylinder placement and strap tension.

B) Test-Gas Pressure Test:

- 1- Connect 5 of 6 hydrogen cylinders to flexible manifold hoses, verifying hose connections from hydrogen storage cylinders to manifold ports have no sharp bends (5-foot bend radius minimum).*
- 2- Attach 6th cylinder connection to test-gas (95% nitrogen/5% hydrogen).*
- 3- Make certain in-line valve between high and low pressure sides is CLOSED.*
- 4- Slowly open ONLY test-gas valve: Start at 200psi, test with sniffer, increase to 500-600psi, testing with sniffer after each pressure increase.*
- 5- Tighten/repair any leaking fittings as needed.*
- 6- Bring up to nominal operating PSI (2200-2500psi) and slowly open high pressure to low pressure in-line valve.*
- 7- Test all fittings with sniffer.*
- 8- Tighten/repair any leaks as needed.*
- 9- Energize Plug Power unit and run.
- 10- Test Plug Power unit piggyback cabinet low-pressure fittings with sniffer.*
- 11- Test all fittings with sniffer at full pressure: tighten/repair any leaks as needed.*
- 12- Restore Plug Power unit to “standby” mode.
- 13- Close in-line high-to-low valve and test-gas valve.*
- 14- Close test-gas valve and vent test-gas from manifold.*

C) Hydrogen Pressure Test:

- 1- Remove test-gas cylinder hose connection and attach 6th hose to final H2 cylinder.*
- 2- Slowly open one cylinder valve and test all connections with sniffer.*
- 3- Tighten/repair any leaks as needed using anti-spark wrenches.*

- 4- Slowly open all H2 valves.*
- 5- Slowly open in-line high-to-low pressure valve.*
- 6- Test all fittings with sniffer.*
- 7- Tighten/repair any leaks as needed.*
- 8- Energize Plug Power unit and run.
- 9- Test all fittings in cylinder cabinet and Plug Power unit cabinet with sniffer and tighten/repair any leaks as needed using anti-spark wrenches.*
- 10- When pressure testing complete and all leaks addressed, restore Plug Power unit to "standby" mode.

DRAFT

Appendix B: Test Plan

HFC Testing at METS

Test scenarios:

1. Simulated power requirement for power outage (allow extrapolation of data when loads do not match).
 - o normal lab conditions
 - o resistive load
 - o 2-hour test
 - o 250W load
 - o 500W load
 - o 750W load
 - o 1000W (max) load
2. Full run-time time
 - o 500W load
 - o Ambient lab conditions
 - o ~~1 hour~~
 - o ~~8 hour~~
 - o ~~24 hours~~
 - o Until bottles are empty (System performance when low H2 pressure is sensed)
3. Blocking airflow (check with WS to verify if they have any safety checks), prove through man'f and verify safety checks with testing (**in process**)
4. Hydrogen connection is rigid and METS suggests flexible (see at METS)
5. Environmental
 - o What environmental conditions can METS produce? -37C to 74C, what specification requires. **Western systems stated operating temperature range of -40C to +50C. (Verified after meeting)**
 - Cold: -37 C/F?(24 hour, max load)
 - Hot: 50C/122F F? (8 hour, max load)
 - Normal lab conditions - ?

Data on all tests verse time:

- o Voltage
- o Current
- o Power
- o H2 consumption rate (**NOT MEASURED DIRECTLY BY UNIT**)
- o Required time for HFC to produce power after the outage (**can be set from 0 to 60 minutes**)
- o Temperature and humidity inside cabinet*
- o Temperature and humidity of HFC exhaust*
- o Environmental conditions during each test
- o If a cold environment, can we measure any ice damming that may occur at exhaust of HFC
 - Does a simulated BBS cabinet need to be provided?

*For Temp and humidity inside cabinet and on HFC exhaust , AHMCT has 2 Omega-OM-92's that can be used if that helps

<https://www.omega.com/en-us/data-acquisition/data-loggers/temperature-and-humidity-data-loggers/om-90-series/p/OM-92>

Will system shutoff if low pressure alarm is tripped?

DRAFT

Appendix C: Data Collection Template

HFC Testing

Run time	Watt Load	Environmental Conditions	Temperature	Humidity	Voltage	Current	Power
2 hours	250W		Inside: Outside (Exhaust):	Inside: Outside (Exhaust):			
2 hours	500W		Inside: Outside (Exhaust):	Inside: Outside (Exhaust):			
2 hours	750W		Inside: Outside (Exhaust):	Inside: Outside (Exhaust):			
2 hours	1000W		Inside: Outside (Exhaust):	Inside: Outside (Exhaust):			
Full Run Time:	500W		Inside: Outside (Exhaust):	Inside: Outside (Exhaust):			



Appendix D: State Fire Marshall Comments

From: Miller, Reece@DOT <Reece.Miller@dot.ca.gov>
Sent on: Tuesday, August 15, 2023 10:08:01 PM
To: Dave Torick <datorick@ucdavis.edu>; Campbell, Sean P@DOT <sean.campbell@dot.ca.gov>; Shima Nazari <snazari@ucdavis.edu>; Shackelford, Sean@DOT <Sean.Shackelford@dot.ca.gov>; Pearce, Jeremiah C@DOT <jeremiah.pearce@dot.ca.gov>; Goronea, Jeff E@DOT <jeff.goronea@dot.ca.gov>; Quibin, Robertino V@DOT <robertino.quibin@dot.ca.gov>; Myers, Patrick@DOT <Patrick.Myers@dot.ca.gov>; Ellis, Justin@DOT <Justin.Ellis@dot.ca.gov>; Dave Torick <datorick@ucdavis.edu>; Campbell, Sean P@DOT <sean.campbell@dot.ca.gov>; Shima Nazari <snazari@ucdavis.edu>; Shackelford, Sean@DOT <Sean.Shackelford@dot.ca.gov>; Pearce, Jeremiah C@DOT <jeremiah.pearce@dot.ca.gov>; Goronea, Jeff E@DOT <jeff.goronea@dot.ca.gov>; Quibin, Robertino V@DOT <robertino.quibin@dot.ca.gov>; Myers, Patrick@DOT <Patrick.Myers@dot.ca.gov>; Ellis, Justin@DOT <Justin.Ellis@dot.ca.gov>
CC: Manansala, Anthony V@DOT <anthony.manansala@dot.ca.gov>
Subject: RE: Hydrogen Fuel Cells as a battery back up for roadside ITS with Caltrans

Follow up: Follow up

Start date: Tuesday, August 15, 2023 12:00:00 AM

Due date: Tuesday, August 15, 2023 12:00:00 AM

Hi All,

We met with the State Fire Marshal and were able to confirm the following:

1. Vehicle Impact Protection is required as we discussed per CFC 312. This can be by appropriately spaced bollards or guardrail, depending on the site location and district safety evaluation.
2. The SFM Supervisory Team advised that a fire access lane is NOT required for a Hydrogen Fuel Cell system as a single cabinet used in the manner of power backup for a traffic signal, camera system, or other similar uses at this time. If these were to be housed in a structure, such as a small building, this allowance would not apply.
3. Based on the cut sheets and info from Dave, the system appears meet CFC 1206 CSA FC 1 requirements. Because it's hydrogen, NFPA 2 and the CA Electrical Code will apply. NFPA 853, section 6.4 will apply and Chapters 7 and 8 may be applicable as well as they are referenced in CFC 1206.11 and 1206.12. Some of



these sections may be as simple as “checking a box” but need to be fully reviewed.

4. For SFM submittal, a site plan and associated details that provide setbacks and dimensions meeting the requirements of CFC 1206.8 will be required. Details for the vehicle impact protection will be needed, along with foundations and associated attachments for the cabinets, bollards/guardrails, etc. Details that address the other requirements in CFC 1206 will need to be shown on plans, specifications, and/or cut sheets as appropriate.

Please let us know if you have any questions.

Thanks!

Reece Miller, Sr. Architect Spec, LEED AP
Office of Transportation Architecture
Phone 916.227.8215
Cell 916.594.1442

DRAFT



Appendix E: Cease of Testing Email

From: Ellis, Justin@DOT <Justin.Ellis@dot.ca.gov>

Sent: Wednesday, September 6, 2023 3:15 PM

To: Campbell, Sean P@DOT <sean.campbell@dot.ca.gov>; Dave Torick <datorick@ucdavis.edu>

Cc: Eric Nordby <enordby@westernsystems-inc.com>; Tom Cox <tcox@westernsystems-inc.com>;

Hoffman, Keith D@DOT <keith.hoffman@dot.ca.gov>; Myers, Patrick@DOT

<Patrick.Myers@dot.ca.gov>; Shackelford, Sean@DOT <Sean.Shackelford@dot.ca.gov>

Subject: HyMax Testing

Hi Sean and Dave,

Today Tom Cox came to the lab and made some adjustments to the fuel pressure regulator on the fuel cell to try and fix the issue with the repeated H2 Sensor leak code. There is a discrepancy in the O&M manual for the desired pressure at idle vs. the desired pressure under load. If one is set to the settings described in the manual the other is not at the desired pressure (per the manual).

In order to ensure that the unit was properly reset (as Sean S. and Tom were not able to recreate the H2 sensor leak code), I personally removed all power to the unit (removing the 48 VDC cable as would be standard in a battery replacement) and then reconnected power. On startup, the unit produced a foul odor and threw a list of codes (see below). The unit was unable to start and would remain in the state "warmup" under load and no load conditions. Utility power was applied to the BBS and the unit returned to "cooldown" state. When utility power was removed again the fuel cell once again produced the same odor and produced an H2 Sensor leak code (also below), still not able to return to a run condition (even under no load conditions).

At this point I am deeming the unit non-functional, and METS testing of this unit will cease today. Data collected so far will be provided to the team in a report to be developed by my branch. I do not feel confidence in the safety of continuing testing based on the repeated alarms that the unit is producing as well as the odor emitting from the fuel cell. While conversation has been had between my staff and Western Systems, I am not comfortable with any alarm codes being present on a unit that is connected per the manufacturer O&M manual and Western System's staff installing the unit. I would appreciate a root cause analysis performed on the unit so that we can all understand why the system is generating these alarms and the new odor.

Eric, please coordinate the return shipping for the fuel cell with Sean S.





Thank you,

Justin Ellis P.E.

Cell: (916) 591-8924

Branch Chief

Electrical Quality Assurance and Source Inspection (EQASI) Branch

Materials and Engineering Testing Services

5900 Folsom Blvd

Sacramento, CA 95819

DRAFT



Appendix F: List of Alarms

03530 09/06/23 14:39:35	USER LOGGED IN	WEB ADMIN1
3529 09/06/23 14:37:17	RUN END DATA	CV-Sys Days To Next Exer: 1
3528 09/06/23 14:37:17	RUN END DATA	CV-Sys T: 13 61 20.1
3527 09/06/23 14:37:17	RUN END DATA	CV-Sys B: 0 0 0.0
3526 09/06/23 14:37:17	RUN END DATA	CV-Sys O: 0 4 # 87
3525 09/06/23 14:37:17	RUN END DATA	CV-Sys 26:17h 14.93kh 567.73w
3524 09/06/23 14:37:17	CONTACT STOP	CV-Sys
3523 09/06/23 14:37:17	SYSTEM OUTPUT	CV-Sys 20.4v 53.9c 25.3c
3522 09/06/23 14:37:17	SYSTEM OUTPUT	CV-Sys Min O/T/B: 0w 0w 0w
3521 09/06/23 14:37:17	SYSTEM OUTPUT	CV-Sys Max O/T/B: 5w 60w 0w
3520 09/06/23 14:37:17	SYSTEM OUTPUT	CV-Sys Bot: 8.8v 0.3a 0w
3519 09/06/23 14:37:17	SYSTEM OUTPUT	CV-Sys Top: 20.5v 2.0a 36w
3518 09/06/23 14:37:17	SYSTEM OUTPUT	CV-Sys out: 50.3v 0.0a 0.0w
3517 09/06/23 14:36:59	SYSTEM RUNNING	CV-Sys
3516 09/06/23 14:36:56	START UP DATA	CV-Sys Top/Bot OCV: 22.69v 0.15 v
3515 09/06/23 14:36:53	SYSTEM START ATTEMPT	CV-Sys Top Module
3514 09/06/23 14:36:31	ALARM ON	CV-Sys Mn,BotMod Fail OCV
3513 09/06/23 14:36:31	SYSTEM RUN ENDED	CV-Sys
3512 09/06/23 14:36:31	WARNING	CV-Sys Bot OCV Fail: 4.57 v
3511 09/06/23 14:36:21	SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
3510 09/06/23 14:35:59	WARNING	CV-Sys Mj,ModFail, Open CV
3509 09/06/23 14:35:59	SYSTEM RUN ENDED	CV-Sys
3508 09/06/23 14:35:59	WARNING	CV-Sys Bot OCV Fail: 4.63 v
3507 09/06/23 14:35:59	WARNING	CV-Sys Top OCV Fail: 4.47 v
3506 09/06/23 14:35:48	SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
3505 09/06/23 14:35:26	WARNING	CV-Sys Mj,ModFail, Open CV
3504 09/06/23 14:35:26	SYSTEM RUN ENDED	CV-Sys
3503 09/06/23 14:35:26	WARNING	CV-Sys Bot OCV Fail: 4.36 v
3502 09/06/23 14:35:26	WARNING	CV-Sys Top OCV Fail: 4.33 v
3501 09/06/23 14:35:16	SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
3500 09/06/23 14:34:55	START UP DATA	CV-Sys Alarms: 0000000000000000
3499 09/06/23 14:34:55	START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
3498 09/06/23 14:34:55	START UP DATA	CV-Sys FID = CC:02.07.08
3497 09/06/23 14:34:55	START UP DATA	CV-Sys LVS= 47.9,2,52.5,45.1
3496 09/06/23 14:34:55	START UP DATA	CV-Sys 48.8v,1180p,2.91v,2.45v
3495 09/06/23 14:34:55	CONTACT START	CV-Sys Contact SN: PPS23249002
3494 09/06/23 14:34:54	ALARM OFF	CV-Sys Mj,Rt H2 SensorLeak
3493 09/06/23 14:34:53	SYSTEM RUN ENDED	CV-Sys
3492 09/06/23 14:34:53	WARNING	CV-Sys Mj,Rt H2 SensorLeak
3491 09/06/23 14:34:53	SYSTEM RUN ENDED	CV-Sys
3490 09/06/23 14:34:53	ALARM ON	CV-Sys Mj,Rt H2 SensorLeak
3489 09/06/23 14:34:45	SYSTEM START ATTEMPT	CV-Sys Bot/Top Modules
3488 09/06/23 14:34:43	START UP DATA	CV-Sys Alarms: 0000000000000000
3487 09/06/23 14:34:43	START UP DATA	CV-Sys FID = E11CV:02.07.08.TM
3486 09/06/23 14:34:43	START UP DATA	CV-Sys FID = CC:02.07.08
3485 09/06/23 14:34:43	START UP DATA	CV-Sys LVS= 47.9,2,52.5,45.3
3484 09/06/23 14:34:43	START UP DATA	CV-Sys 51.4v,1180p,2.99v,3.00v

3483 09/06/23 14:34:43 CONTACT START CV-Sys Contact SN: PPS23249002
3482 09/06/23 14:34:20 SYSTEM OUTPUT CV-Sys Bot: 0.2v 11.5a 0w
3481 09/06/23 14:34:20 SYSTEM OUTPUT CV-Sys Top: 0.2v 0.4a 0w
3480 09/06/23 14:34:19 EXERCISE DATE CHG CV-Sys Date was bad, Tomorrow Set
3479 06/14/23 13:17:42 EXERCISE DATE CHG CV-Sys Date was bad, Tomorrow Set
3478 06/14/23 13:17:42 CONV SYSTEM ENERGIZED CV-Sys Reset Status Reg: 0x48
3477 09/06/23 14:34:19 SYSTEM ENERGIZED CC-Sys Reset Status Reg: 0x48
3476 09/06/23 14:32:00 SYSTEM DE-ENERGIZED CV-SUI
3475 09/06/23 14:33:56 CONTACT STOP CV-Sys
3474 09/06/23 14:33:56 SYSTEM OUTPUT CV-Sys 21.1v 45.8c 26.4c
3473 09/06/23 14:33:56 SYSTEM OUTPUT CV-Sys Min O/T/B: 0w 0w 0w
3472 09/06/23 14:33:56 SYSTEM OUTPUT CV-Sys Max O/T/B: 1735w 1002w 994w
3471 09/06/23 14:33:56 SYSTEM OUTPUT CV-Sys Bot: 21.1v 2.4a 48w
3470 09/06/23 14:33:55 SYSTEM OUTPUT CV-Sys Top: 21.1v 2.3a 51w
3469 09/06/23 14:33:55 SYSTEM OUTPUT CV-Sys out: 52.5v 0.2a 12.4w
3468 09/06/23 14:26:37 SYSTEM RUNNING CV-Sys
3467 09/06/23 14:26:34 START UP DATA CV-Sys Top/Bot OCV: 23.03v 23.01v
3466 09/06/23 14:26:28 SYSTEM START ATTEMPT CV-Sys Bot/Top Modules
3465 09/06/23 14:26:28 START UP DATA CV-Sys Alarms: 0000000000000000
3464 09/06/23 14:26:28 START UP DATA CV-Sys FID = E11CV:02.07.08.TM
3463 09/06/23 14:26:28 START UP DATA CV-Sys FID = CC:02.07.08
3462 09/06/23 14:26:28 START UP DATA CV-Sys LVS= 47.9,2,52.5,29.8
3461 09/06/23 14:26:28 START UP DATA CV-Sys 54.0v,1184p,3.06v,3.06v
3460 09/06/23 14:26:28 CONTACT START CV-Sys Contact SN: PPS2324902

Appendix G: Test Data

HFC Testing

Run time	Watt Load	Environmental Conditions	Temperature	Humidity	Voltage (DC)	Current (A) (DC)	Power Displayed by Unit (W)
2 hours	250W (232W)	74 degrees	Inside: N/A Outside (Exhaust): N/A	Inside: N/A Outside (Exhaust): N/A	52.7	4.3 to 8.1	222 to 425
2 hours	500W (472W)	81 degrees	Inside: N/A Outside (Exhaust): N/A	Inside: N/A Outside (Exhaust): N/A	52.6	7.5 to 15.0	407 to 780
2 hours	750W (720W)	73 degrees	Inside: N/A Outside (Exhaust): N/A	Inside: N/A Outside (Exhaust): N/A	52.6	12.1 to 23.9	642 to 1258
2 hours	1000W (952W)	82 degrees	Inside: N/A Outside (Exhaust): N/A	Inside: N/A Outside (Exhaust): N/A	52.6	16.6 to 31.0	857 to 1588
Full Run Time:	500W		Inside: N/A Outside (Exhaust): N/A	Inside: N/A Outside (Exhaust): N/A			