SCRAM™
CONTINUOUS ALCOHOL MONITORING

Our flagship technology. The SCRAM Continuous Alcohol Monitoring™ system is the world's most widely used and trusted 24/7 transdermal alcohol testing system. For high-risk, hardcore DUI and alcohol offenders.

SCRAM Continuous Alcohol Monitoring™

Continuous Alcohol Monitoring (CAM), or combined CAM + House Arrest, at the flip of a switch. It's 24/7 monitoring for your higher-risk/higher-need alcohol clients.

SCRAM Remote Breath™
The first and only handheld, wireless, portable breath alcohol device with automated facial recognition and GPS with every single test. For clients who have earned less intensive testing and monitoring.

SCRAM Systems GPS Solutions
The only provider with both CDMA (Verizon/Sprint) and GSM (AT&T) network options for your GPS program. SCRAM One-Piece GPS™ (CDMA) is from the industry-leading makers of Omnilink GPS technologies. And SCRAM Dual-Function GPS™ (GSM) delivers both GPS and house arrest monitoring options in a single unit, allowing for dynamic changes to supervision levels within it's tuning equipment.

SCRAM House Arrest
Standalone house arrest monitoring built to work with today's home communications systems. Operates over home Internet routers, standard or digital phone lines, DSL, Vonage®, or an optional SCRAM-provided wireless system.

SCRAM Systems Program Management Center™
The SCRAMnet™ secure web application is the core of the Project Management Center (PMC), which brings together everything from monitoring of our entire product line to our best-in-industry court support program, 24/7 customer support, mobile applications, offender compliance analytics, and beyond.

I really believe that if judges and probation departments knew about this technology and understood how successful it is, it would be on the ankle of every alcohol-dependent offender in the criminal justice system."

— **C. West Huddleston**
C.E.O, National Association of Drug Court Professionals

SCRAM Systems: **OPTIONS** in Alcohol Monitoring

Lower Level
Alcohol Misuse

- 1st time DUI
- Public order offenses
- Low BAC at time of arrest
- Earns reduced monitoring through program compliance

Higher Level
Alcohol Dependence and Addiction

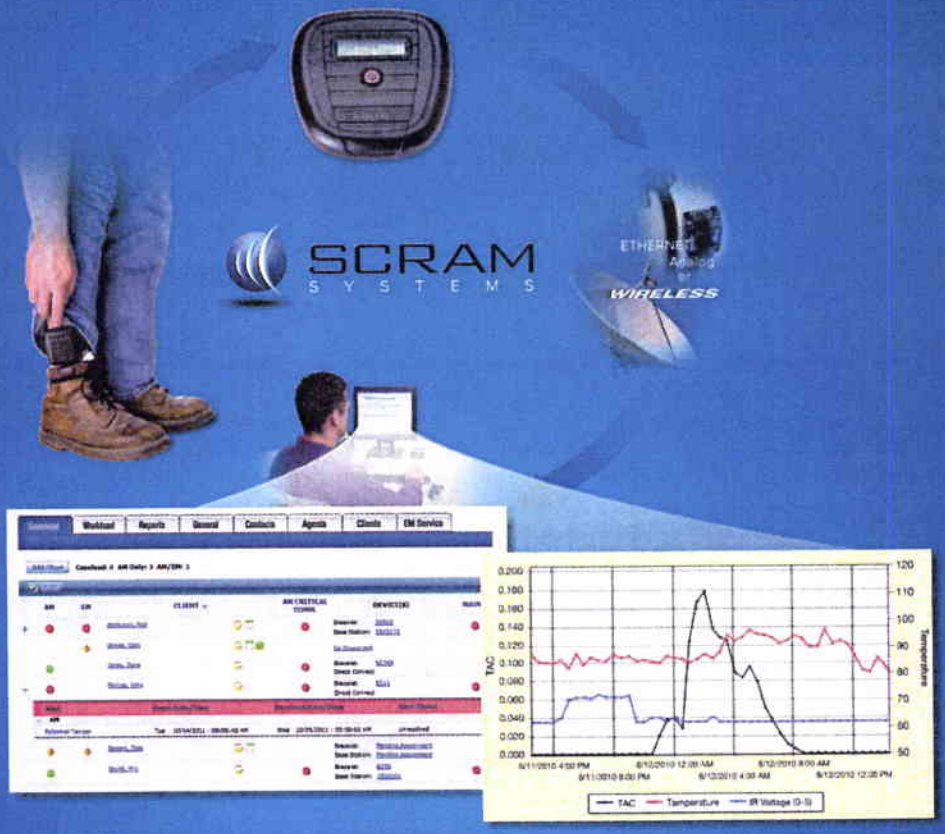
- Repeat/Hardcore Drunk Drivers
- Domestic Violence
- High BAC at time of arrest
- Requires more intensive monitoring after a violation

Sober Days™

A Sober Day is a 24-hour period in which a monitored individual has no confirmed consumption of alcohol and no confirmed attempt to tamper or circumvent testing in order to mask the consumption of alcohol. To be a true Sober Day, a client must:

- Be able to present evidence-based confirmation of sobriety for each 24-hour period
- Be monitored transdermally in order to meet the required test frequency
- Be tested a minimum of once per hour every 24-hour period
- Be tested automatically, with no requirement to participate in testing

According to data from the hundreds of thousands of individuals monitored with SCRAM CAM technology, **99.4% of all clients, every day, are completely sober and compliant**. No drinking, no tampering.



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0214.v2

FEATURES

- Independently tested, court-validated
- 24/7 Customer Support
- Dynamic, flexible training
- AMS Data Analysis of every alert
- TAC readings correlate to BAC readings with a 0.02 confirmation threshold

CAM Bracelet

- Worn 24/7
- Automated, noninvasive
- Samples perspiration every 30 minutes
- Industry-leading anti-tamper technology
- Optional House Arrest curfew monitoring in one bracelet

CAM Base Station

- Multiple ways to connect, including Ethernet and SCRAM Wireless™
- Automatically uploads and transmits data at prescheduled time(s)
- Downloads software updates from SCRAMNET to the CAM Bracelet
- SCRAM Direct Connect™ allows agent downloads in the office, on-demand, direct to a computer

SCRAMNET

- Central, secure, web-based platform where all data is stored, analyzed, reported, and maintained
- User-friendly tool that aggregates, analyzes, and graphs test results
- Custom notification and reporting protocols
- Flags and graphically depicts alcohol alerts, obstructions, tampering, schedule noncompliance, battery and equipment information
- Integrates with all SCRAM Systems™ monitoring technologies

BENEFITS

- 99.4% compliance each and every day
- National network of service providers
- Conclusively distinguishes between alcohol consumption and environmental alcohol sources
- Single-source admissibility—no back-up tests required
- Flexible data management—expand, consolidate, view at-a-glance assessments, or summarize an entire caseload
- Continuous testing means no drinking around test schedules

SCRAM™
SYSTEMS

AMS
ALCOHOL MONITORING SYSTEMS, INC

SCRAM from AMS

****CONFIDENTIAL****

Report for:	Vigilnet of PA
Report Name:	SCRAM System Non-Compliance Report
Report Date:	9/3/2014
Readings From:	6/15/2014 - 6/16/2014
Offender Name:	John Doe
Case Number:	12345

Report Prepared By:

Alcohol Monitoring Systems, Inc

Doe, John		Parole	6/15/2014
Agency:	Lancaster County Probation	**Case Number:**	12345
Agent:	Woods, Anthony	**File Number:**	
Court:	Lancaster District	**Days On Program:**	29
Judge:	Madenspacher, Joe	**Bracelet Number:**	17520

Technology

The SCRAM System uses an electrochemical fuel cell to detect alcohol. The fuel cell is the same one used in Drager's Alco-test Breath Devices. At a predetermined interval, a pump in the bracelet pulls a controlled sample to the alcohol sensor for analysis. The amount of reaction of the fuel cell is interpreted and a Trans-dermal Alcohol Concentration (TAC) is calculated. This calculation is an estimation of the Blood Alcohol Concentration (BAC).

Tamper Technology is contained within the bracelet and is used to detect several different types of tampers: obstructions, removals, cut straps and damage. The technology used to detect removals and obstruction material is the Infrared (IR) sensor. Combinations of the IR sensor, temperature sensor and the fuel cell voltage can be used to confirm obstructions and removals.

The IR sensor is used to make certain the bracelet is on the client and to detect materials being placed between the bracelet and the leg, potentially blocking the faceplate. The IR sensor, which is contained in the SCRAM bracelet, provides an IR beam between the bracelet and the leg of the client; the reflection of this beam is then measured in volts.

The temperature sensor monitors the bracelet temperature to detect possible tampers and removals. The temperature sensor is located in the bracelet, thus impacted by the body's warming effect and the environmental temperature

Data Interpretation

The Trans-dermal Alcohol Concentration (TAC) readings are the black line and are represented on the scale to the left of the graph. The Infrared (IR) readings are identified on the light blue line and the temperature readings are displayed on the red line and represented by the scale on the right of the graph.

Confirmed Consumption

Alcohol detections confirmed as consumption identify the Blood Alcohol Curve and include both the presence of absorption to the peak with an absorption rate less than 0.05% per hour, and the presence of elimination with an elimination rate less than 0.025% per hour if the peak was less than 0.150% or less than 0.035% per hour if the peak is 0.150% or above.

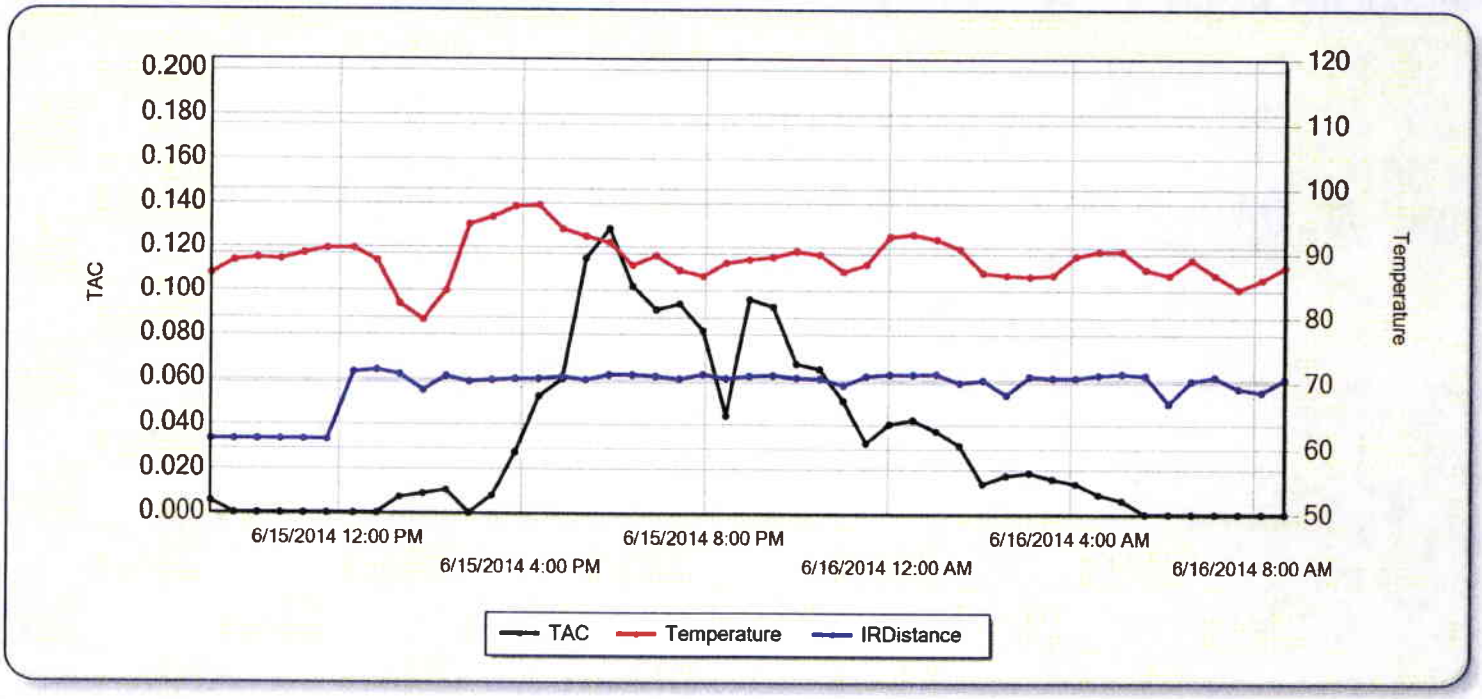
The graph below isolates the confirmed alcohol consumption event.

Confirmed Tamper

When the SCRAM bracelet was placed on the client, the IR sensor established an initial IR baseline reading. Variation outside of the acceptable variance is an indication of non-compliance and may point toward an attempt to defeat the technology of the bracelet and prevent alcohol testing.

The graph below isolates the confirmed tamper event

Overlay Graph



Action Log

Date/Time	Action	Status	Username
7/3/2014 12:08 PM			pstephenson
	Contact Agent	Completed	
	Confirmable		
	Confirmed Consumption with tamper. The absorption rate is 0.025%/hr and elimination rate is 0.011%/hr. Has been reviewed		
6/19/2014 11:20 AM			pstephenson
	Contact Agent	In Process	
	Confirmable		
	Confirmed Consumption with tamper. The absorption rate is 0.025%/hr and elimination rate is 0.011%/hr. Has been reviewed		
6/19/2014 7:51 AM			pstephenson
	Published To DAP	Completed	
	Confirmed Consumption with tamper. The absorption rate is 0.025%/hr and elimination rate is 0.011%/hr.		
6/18/2014 2:54 PM			pstephenson
	UndoTransfer	Completed	
	Confirmed Consumption with tamper. The absorption rate is 0.025%/hr and elimination rate is 0.011%/hr.		
6/18/2014 2:54 PM			pstephenson
	Contact Agent	Completed	
	Confirmable		
	Confirmed Consumption with tamper. The absorption rate is 0.025%/hr and elimination rate is 0.011%/hr.		
6/18/2014 10:26 AM			SituationAnalyzer
	Transfer	Completed	

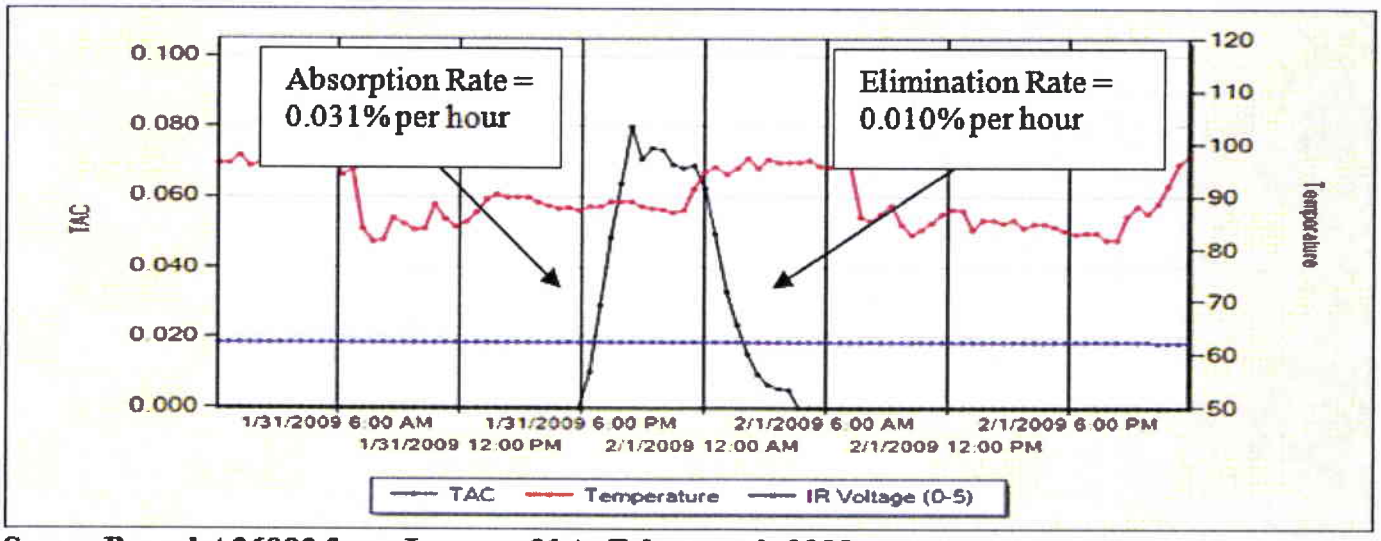
Confirmable

Alert has been determined to be a confirmed violation.

Exhibit: Confirmable Drinking Event

Test conducted on January 31, 2009

The graph below is the result of testing performed by AMS. The Subject was a female volunteer. The unit was attached to the subject and the subject was instructed to go about their normal daily activities for duration of 30 days.



Scram Bracelet 36983 from January 31 to February 1, 2009

When confirming a consumption event AMS looks for the following criteria:
1. Was there an established zero prior to the event?
2. Did the event reach a peak?
3. Was the absorption rate of the event Less than 0.050% per hour?
4. Did the event return to zero?
5. Was the elimination rate of the event less than 0.025% per hour if peak was less than 0.150% or less than 0.035% per hour if peak is 0.150% or above?
6. Was the elimination greater than or equal to 0.003% but less than the maximum limit stated in number 5 above?
7. Does it pass the contaminate test?

Analysis of above event:

Absorption Rate:

Event begins at 6:25 PM on January 31, 2009 with a .010% reading. The TAC continues to rise until reaching a peak of 0.080% at 8:27 PM on January 31, 2009. This represents an absorption rate of 0.031% per hour.

Elimination Rate:

The event then begins the elimination phase starting at 8:58 PM on January 31, 2009 returning to zero at 4:42 AM on February 1, 2009. This represents an elimination rate of 0.010% per hour.

Actual drinking reported:

5 Screw Drivers starting at approximately 5:00 PM and ending at 9:00 PM on January 31, 2009.

The event shown above meets all of the criteria listed above and is therefore confirmable as a consumption event.

Exhibit: SCRAM II Obstructions

IR is an abbreviation for Infrared. The IR sensor is made up of two parts, a transmitter and a receiver. The IR transmitter transmits an invisible beam of light that reflects off of the skin of the subject and is received back at the IR receiver. The amount of light received will produce a voltage proportional to the amount of light reflected off of the subject's skin.
The IR Sensor is used to make certain the bracelet is on the client and to detect materials (obstructions) being placed between the bracelet and the leg, potentially blocking the faceplate and inhibiting the bracelets ability to detect alcohol.

IR Compliance

A compliant subject that is not obstructing the Infrared sensor should appear as shown in Figure 1.

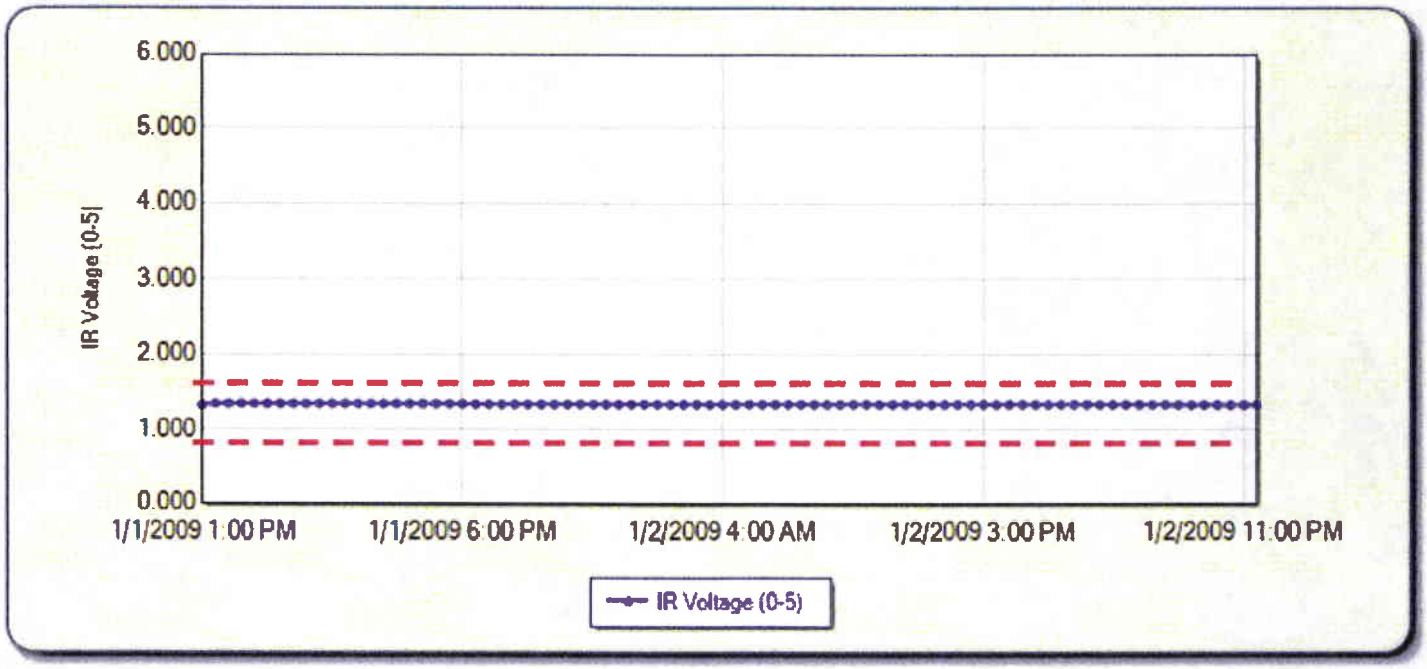


Figure 1: Scram unit 32487 showing compliant IR from 1/1/09 through 1/2/09

The blue line represents the bracelets baseline infrared voltage. The dotted red line enveloping the baseline IR voltage shows the acceptable range of change in the IR voltage, this range is equal to plus 12% of the baseline voltage or minus 17% of the baseline voltage. The IR voltage is allowed to exceed this range for short periods of time.

Obstruction Confirmation Criteria

Tamper over:

1. 8 hours with the IR voltage deviation equal to or greater than (+)12% of the baseline voltage, and a TAC level of less than .005%.
2. 3 hours with the IR voltage deviation equal to or greater than (+)12% of the baseline voltage, and at least one TAC reading being equal to or greater than 0.005% during the same time span.

Tamper under:

1. 8 hours with the IR deviation equal to or less than (-)17% of the baseline voltage, and a TAC level of less than 0.005%.
2. 3 hours with the IR voltage deviation equal to or less than (-)17% of the baseline voltage, and at least one TAC reading being equal to or greater than 0.005% during the same time span.

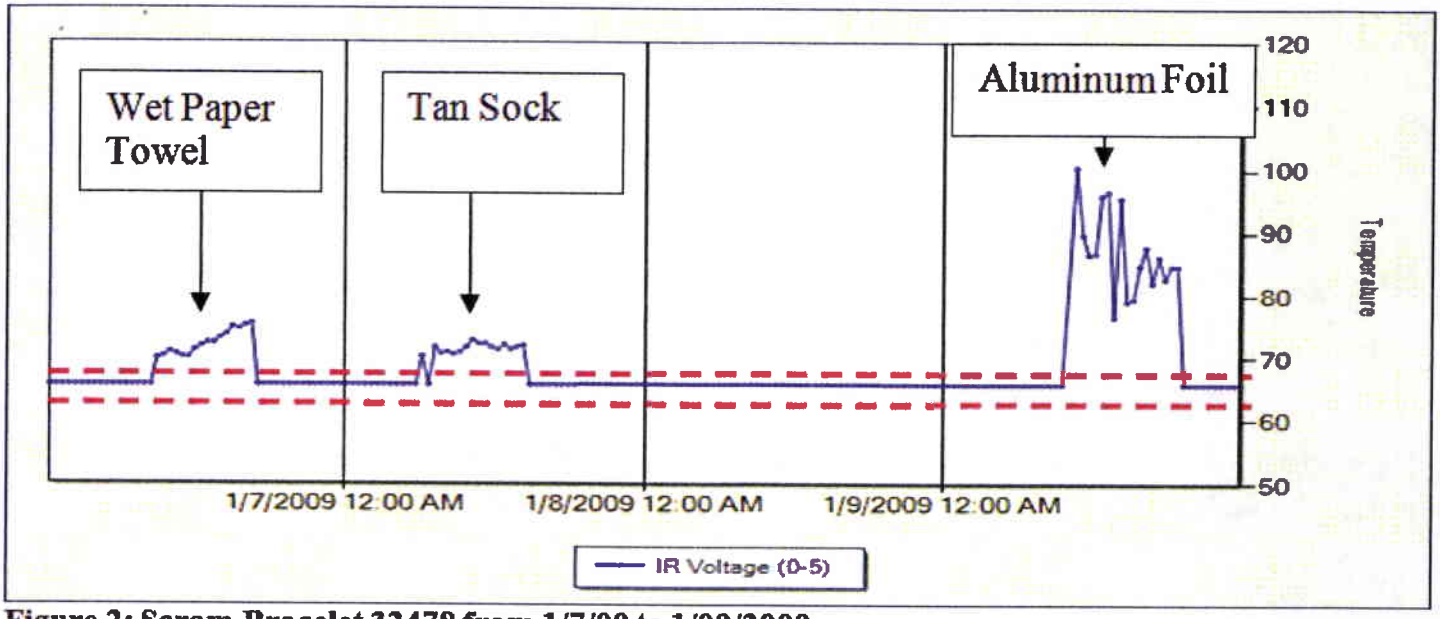


Figure 2: Scram Bracelet 32478 from 1/7/09 to 1/09/2009

IR Baseline Voltage = 1.338 Volts

Wet Paper Towel	Tan Sock	Aluminum Foil
+12% Over Baseline Voltage = 1.498 Volts Consecutive Readings 12% over Baseline = 17 Total Obstructed Duration = 8 Hours 4 Minutes	+12% Over Baseline Voltage = 1.498 Volts Consecutive Readings 12% over Baseline = 17 Total Obstructed Duration = 8 Hours 4 Minutes s	+12% Over Baseline Voltage = 1.498 Volts Consecutive Readings 12% over Baseline = 17 Total Obstructed Duration = 8 Hours 6 Minutes s

All of these obstructions are Confirmable.