



Test Result Final Report Printed on: 10/26/2016 7:59 AM by Doe, John
 Accession: 0100016663
 Patient Name: Test, Patient
 DOB: 10/02/1953
 MRN: HF4600000
 Collected By: Staff, GCPI
 Collection Date: 10/24/2016 2:55 PM
 Agency: Jane Doe, ARNP-BC
 Requesting Party: John Doe
 Tested By: John Doe
 Test Date: 10/25/2016

Test	Result	Cutoff
Amphetamine	Negative	>= 1000 ng/mL
Barbiturates	Negative	>= 200 ng/mL
Benzodiazepines	Negative	>= 200 ng/mL
Cannabinoids	Negative	>= 50 ng/mL
Cocaine	Negative	>= 300 ng/mL
Ecstasy	Negative	>= 500 ng/mL
Ethyl Glucuronide	Negative	>= 99.99 ng/mL
Heroin	Negative	>= 300 ng/mL
Methadone	Negative	>= 300 ng/mL
Opiates	Positive	>= 300 ng/mL
Propofol	Positive	>= 300 ng/mL
Valproic Acid	Negative	>= 300 ng/mL
Zolpidem	Negative	>= 300 ng/mL
Zyban	Normal	>= 300 ng/mL
Zyban	Normal	>= 300 ng/mL

Thermo Scientific complete automated drugs of abuse testing solution

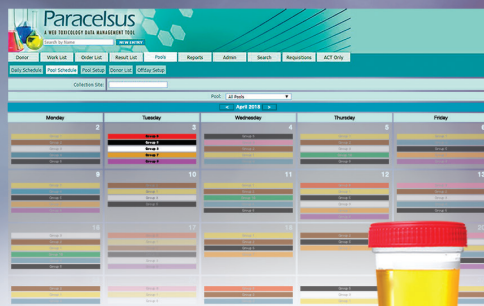
From collection and chain of custody to drug testing and reporting of results

Thermo Scientific™ Complete Automated Drugs of Abuse Testing Solution

A common myth is that automated drug testing is expensive and hard to do. In fact, for labs that perform an increasing number of test samples per month, automation is often less expensive, more efficient, and cost effective compared to Point-of-Care (POC) cups / strips or send outs. Automated drug testing is easier than one might initially think.

Thermo Scientific Automated Drug Testing

Scheduling & Chain of Custody



- Automate and track Chain of Custody via barcoded specimens using laboratory software system such as the ACT Innovation's Paracelsus™ software
- Develop and automate participant test schedules
- Tailor participant test panels to their drug history
- Integrate test results and reports with ACT Innovation's Drug Court Case Management (DCCM™) software
- Web-based software allows for fast and immediate access at your fingertips
- Accurate specimen tracking and reporting is ensured via barcoded and computerized process

Drug Tests / Panel



- Choose from a broad menu of testing options
 - 25 urine tests*
 - 11 oral fluid tests**
 - 4 specimen validity tests
- Automated test results provide highly accurate results
- Test for Specimen Adulteration (Creatinine)
- Schedule for randomized drug testing
- Develop flexible drug testing panels to reflect the needs of your participant and drug trends
- Screen for new drug use with Oral Fluid Testing (OFT)
 - Gender neutral collections
 - Test for new use within 24 hours

* CJ&F Only: DRI Ethyl Glucuronide (EtG), DRI Fentanyl, CEDIA AB-PINACA, and CEDIA UR-144/XLR-11 urine DAT assays are currently for Criminal Justice and Forensic use only

** CEDIA oral fluid assays for barbiturates, benzodiazepines, methadone, oxycodone, and buprenorphine are currently for Criminal Justice and Forensic use only

What is automated drug testing?

Automated drug testing integrates all steps involved in monitoring participants for drug use – from scheduling a test, tracking chain of custody, barcoding specimens, testing the specimen for drug use, to reporting test results electronically. Test results can be printed or securely shared via encrypted email to designated recipients such as probation officers, coordinators, and other personnel or agencies. Such an easy and secure sharing process reduces or eliminates the need for storing paper copies of participant's test results and manually writing down the data. Storing data electronically also helps easily track and find participant results and historical drug usage.

While POC may appear to be the cheaper option on the front end, there are hidden costs in lost information, re-tests, and lack of flexibility that can affect outcomes and productivity. Automation reduces inaccuracies that result from human error, subjectivity, and provides the flexibility to adjust drug panels for randomized testing and adapt to the changing drug trends in your region. An automated lab will safeguard your program, provide better results, save time and money.

Automated Drug Testing



- First results in 15 minutes, once instrument is up and running, with next results in approximately 30 seconds*
- Test from one up to 50+ specimens during a single run*
- Routine system checks to assess instrument performance and ensure testing validity**
- Randomly test >20 different drugs at any one time*
- Add specimens at any time during a run, without interrupting the ongoing run*

* Applicable to most but not all analyzers. Refer to the manufacturer's product specification

** Please consult your local regulations for guidance on instrument validations and system check requirements

Results and Reporting

Test	Result	CutOff
Amphetamine	Negative	>= 1000 ng/mL
Barbiturates	Negative	>= 200 ng/mL
Benzodiazepines	Negative	>= 200 ng/mL
Cannabis	Negative	>= 50 ng/mL
Cocaine	Negative	>= 300 ng/mL
Ecstasy	Negative	>= 500 ng/mL
Ethyl Glucuronide	Negative	>= 99.99 ng/mL
Methadone	Negative	>= 300 ng/mL
Opiates	Positive	>= 200 ng/mL
Oxycodone	Positive	>= 99.99 ng/mL
Buprenorphine	Negative	>= 99.99 ng/mL
Creatinine	Normal	< 10 mg/dL
PH	Normal	< 4.5 OR >= 9 mg/dL
Specific Gravity	Normal	< 1.025 OR >= 1.035 g/mL

- Visualize and approve test results immediately before report distribution
- Create "Normalized" reports – adjust creatinine levels against drug test results
- Share results securely via encrypted email to drug court staff and/or probation officer
- Data is automatically exported to DCCM for accurate tracking
- Option to print out results for immediate access
- Track participant drug testing history with summary reports
- Choose from 25 different participant report options

“We notice that our defendants are getting creative with evading positive test results and we need to keep up with them. So, we decided to adopt a more accurate technology to keep up with the changing world. Once we got over the fear of learning and using this new machine, we found that our drug program was not only more cost effective but also had better participant success. We can test more participants, for more drugs, get more accurate results and still remain within our budget.”

- J. Carter, Specialized Docket Coordinator/Probation Officer, Mount Vernon Municipal Court, Ohio.

The Chemistry Analyzer: highly accurate drug testing

Chemistry analyzers are finely tuned machines that automate the drug testing process of urine and oral fluid specimens. Almost any manufacturer's analyzer can be integrated into the Thermo Scientific Complete Automated Drugs of Abuse Testing Solution, such that you can select the machine that best suits your testing needs. Chemistry analyzers have large compartments where one can load many different specimens and drug tests, providing the flexibility you may need to run many different samples simultaneously. Testing is easily tailored to the participant's drug use patterns, as chemistry analyzers have random access capability, allowing you to perform any test in any order. Accurate, clear, and easy to interpret results are usually available in just a matter of minutes without any guesswork.

These flexible features of chemistry analyzers, can help make your drug court program more effective in monitoring abuse and supporting participant efforts to change behaviors.

- **Supports a broad testing panel**
 - Randomly test >20 different drugs at any one time*
- **Immediate Results**
 - First results available in less than 15 minutes, once the instrument is up and running with next results available in approximately 30 seconds*
- **Scalable**
 - Test from one up to 50+ specimens during a single run*
- **Continuous feed**
 - Add specimens at any time during a run*
- **Accurate Results**
 - Daily system checks assess system performance and ensures testing validity**

* Applicable to most but not all analyzers. Refer to the manufacturer's product specification.

** Please consult your local regulations for guidance on instrument validations and system check requirements.



Thermo Scientific Drugs of Abuse Tests

The Thermo Scientific urine drugs of abuse tests help monitor for street drugs or prescription drugs. Our broad test menu allows you to create different and randomized test panels that fit the needs of your drug court program. To create your test panel, select from 25 urine tests*, 4 Specimen Validity Tests (SVTs), and 11 oral fluid tests**. These test panels can be tailored to monitor for the participant's historical behavior or abused drugs trending in your region. While urine tests help monitor drug abuse, the SVTs allow you to monitor if the specimen has been tampered with or not, since urine tampering is a major concern and can affect the success of your drug court program.

Choose from a broad test panel

- 25 urine tests*
- 11 oral fluid tests**
- 4 specimen validity tests

Highly accurate results – Thermo Scientific Drugs of Abuse Tests

Make sanction decisions with greater confidence

- No more guess work with “faint lines”
- Clear electronic test results
- Automation minimizes human error
- Test Controls used for validation

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** CEDIA oral fluid assays for barbiturates, benzodiazepines, methadone, oxycodone, and buprenorphine are currently for Criminal Justice and Forensic use only



Don't let “faint lines” get in the way of your test results

Interpreting test lines on cups or strips can be ambiguous and often requires repeat testing, which can lead to increased send out confirmation costs. The uncertainty of visually interpreting cups or strips is eliminated with automation as test results are read electronically by the analyzer. An efficient, finely-tuned system where the analyzer, test reagents, and software work together will provide an accurate, cost-effective process that supports the needs of your drug court program.

• Test for Specimen Adulteration: Thermo Scientific Specimen Validity Tests

Specimen Validity Tests (SVTs) are used to monitor urine specimens for possible tampering by dilution, substitution or adulteration. With the option to choose from 4 specimen validity tests, one can easily and confidently monitor for specimen tampering.

• Urine substitution and/or dilution:

Thermo Scientific™ DRI™ Creatinine-Detect™ Test

Dilution is the most common form of specimen tampering by drinking lots of water or by adding tea, apple juice, or other liquids. Any significant drops in a participant's creatinine levels over time, could point to a tampered specimen, despite a negative drug result.

Thermo Scientific™ DRI™ Gravity-Detect™ Test

Normal urine has a higher specific gravity. The lower the specific gravity, the closer its consistency is to water, indicating possible dilution and/or substitution.

• Urine adulteration:

Thermo Scientific™ pH-Detect™ Test

Normal urine should have a pH between 4.7 and 7.8. Urine adulterated with bleach or ammonia will produce a basic pH (pH 11 or greater), while urine adulterated with lemon juice and vinegar will produce an acidic pH (pH 3 or lower).

Thermo Scientific™ General-Oxidant Detect™ Test

Several oxidizing adulterants are being sold with a claim to clear all positive drug test results. The most commonly used oxidizing adulterants are nitrite (Klear™), chromate (Urine Luck™), iodine, bleach, and horseradish peroxidase (HRP) (Stealth™).



- **Screen oral fluids for recent drug use – Oral-Eze™ Tests**

- 11 oral fluid tests*
- Gender neutral collections
- Test for recent drug use (<1 day), e.g. marijuana

Oral fluid collections are easily observed by either gender without the need for restroom facilities. Unlike urine, which can detect use in the past three days or weeks, oral fluids are ideal for detecting use within the past 24 hours. For habitual users, it takes (on average) 3 days for the drugs to clear from urine. However, marijuana can stay in the body's fat cells for weeks, possibly triggering a positive urine test, even when the participant has not had recent use.

**With oral fluid testing, there is no need
for two collectors of both sexes**

Instead of waiting for 30 days for marijuana to be flushed out of a participant's system, the Thermo Scientific Oral-Eze Tests can assist with detecting new use within the last 24 hours, which will confirm if the participant is still adhering to the program. Such a test is specifically relevant for new participants who have a history of chronic marijuana use. Oral fluid tests are also ideal for "in the moment" collections when a participant appears to be under the influence.



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ACT Innovation's Paracelsus™ Software

You decide who to test, when to test, and what to test with just a click of the mouse. ACT Innovation's Paracelsus Software lets you tailor your testing program to your needs and then executes the process automatically. The software allows you to track participant drug testing history, without the need to manually write down test results or keep track of piles of paper. This process is entirely computerized with a bar coded system for accurate specimen tracking and reporting.

If creatinine levels trend down, it's possible that the specimen has been tampered with, despite a negative drug screen. The Paracelsus Software allows you to create "normalized" reports to monitor for specimen adulteration.

Features of the Paracelsus Software

- **Randomized Scheduling and Testing**
 - The randomized, coded phone-in system option eliminates the tedious process of setting-up daily phone recordings
 - Easily adapts to changes in Court Schedules
 - Remote data entry to schedule tests via the web
- **Test Results and Participant Tracking**
 - Interfaces with ACT Innovation's Drug Court Case Management (DCCM™) software
 - Provides access to Client Test Results and Reporting via the internet (web-based)
 - "Normalized" reports – adjust creatinine levels against drug test results
 - Runs up to 25 different participant reports
 - Keeps track of Chain of Custody and Collection Reporting
- **Reporting and Notification of Test Reports**
 - Protects Client Information via automated and secure encryption
 - Automatically notifies drug court staff and/or probation officer via encrypted email
 - Automatically exports data to DCCM software
 - Prints out final report for immediate access



Keep participants
guessing with
randomized testing
and randomized
scheduling

The Value of Working with Thermo Fisher Scientific Your Trusted Partner

- Experts in Drugs of Abuse Testing
- Over 25 years in the drugs of abuse testing industry

Committed to Your Success

- Established on-site and 24/7 phone technical support
- Your Educational Resource — offering webinars, conference workshops, and access to industry leaders

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