

TruNarc is the solution to today's drug identification challenges



In the 1980s, United States law enforcement agencies and especially narcotic investigators faced a wave of drugs that were primarily manufactured outside the U.S. but sold here. These drugs included marijuana, cocaine, heroin, LSD, Methamphetamine and to lesser extent Methaqualone tablets.

If an officer seized a suspected drug, in order to make an arrest, obtain a search warrant or even question the suspect, the officer had to identify the suspected drug by conducting a Presumptive Field Test.

For the past 45+ years, officers have relied on a chemical colorimetric wet test kit to conduct Presumptive Field Tests. The officer would place the suspected drug into a small plastic pouch containing three vials, then sequentially break the hard plastic vials and wait for the chemical to react with the suspected drug. If the substance turned the appropriate color, the officer could identify the drug seized. On several occasions, officers cut themselves when the sharp edges of the broken vials cut through the plastic pouch and into their thumb. Today, that could be very dangerous because fentanyl is often laced into drugs such as heroin and cocaine.



About the Author

Ernie Batista, Retired DEA Agent

After graduating from Florida State University with a Bachelor of Science in Criminology, Ernie started his career at the Palm Beach County Sheriff's Office including a focus on major drug smuggling investigations involving the shipment of multi-ton quantities of marijuana and multi-hundred kilograms of cocaine via smuggler's aircraft into clandestine airfields in Palm Beach County.

Between 1980 and 2002 Ernie worked in a number of different roles in the DEA, including managing DEA offices in Europe, The Middle East, Africa and Canada.

The problem with the chemical colorimetric wet test kits was that the officer needed to have a good indication of the type of drug he was testing in order to select the correct kit. Each kit was designed to test a specific drug. Most drugs could be easily identified solely by color, consistency and appearance, and experienced officers could tell the difference between cocaine, meth and heroin from a visual inspection. Using their experience and information obtained from the suspect, cooperating source and other circumstances of the case, they were able to select the correct chemical wet test to test the evidence.

the streets today. To make it even more difficult, “traditional” drugs such as cocaine, heroin or methamphetamine often look alike as they are white or off-white in color. They are also often laced with drugs such as Fentanyl, Carfentil, W-18, U-4700 and other extremely potent and deadly drugs. Today drug dealers are often poly-drug narcotic dealers/traffickers and may also be involved in the manufacturer of drugs which involve precursors to make the drugs themselves.

The change in drug trafficking in the last few decades has required law

The use of new technology has now entered the arena of drug law enforcement. Modern law enforcement has no choice but to rely on instruments in the field and to use laboratory tested and scientifically approved technology.

The Scientific Working Group for the Analysis of Seized Drugs classifies technology used in the field and in forensic drug laboratories by level, indicating which drug testing technologies are the most accurate, reliable and scientifically proven. These levels range from A through D, with A being the most accurate, etc.

SWGDRUG classifies the colorimetric wet test kits as a Level C technology but rates Raman Spectroscopy as a Level A.

By using a Raman instrument to conduct presumptive field tests, the officer increases the technology he is using in the field from a Level C to a Level A. Raman provides officers with confidence that they are standing on firm ground when they charge a suspect with possession of a particular drug. Although officers use Raman Technology as a Presumptive Field Test for Probable Cause purposes for arrests, search warrants, etc., if the case goes to trial the drug evidence is always sent to the Forensic Drug Lab for confirmatory analysis.

Thermo Fisher Scientific, a \$20 Billion-dollar company based in the Boston, Massachusetts area with 70,000 global employees, has been manufacturing handheld Raman instruments for use in the field by the U.S. Military, fire departments/HazMat teams, Bomb Squads (EOD) and Clandestine Drug Lab Investigators for over a decade. Thermo Fisher is the leader in the



Law enforcement now has much better tools to identify drugs at the scene.

Things have changed. It's a new world for drug law enforcement.

Today, officers are faced with not only “traditional” drugs such as marijuana, cocaine, methamphetamine and heroin but hundreds of synthetic drugs. Traffickers frequently change the molecular structure of synthetic drugs to evade identification and seizure by law enforcement. It's impossible for officers to be familiar with the hundreds of drugs originating in China, Mexico and elsewhere that are being sold on

enforcement to change the way they identify the wide range of drugs and precursors they routinely encounter.

During the last several years other investigative specialties, such as bomb squads, HazMat teams and Clan Lab teams have switched from traditional identification methods to the use of new scientific instruments to quickly and safely identify a wide range of substances.

development of field instruments that are extremely accurate, easy to use, and do not require calibration or internet connections to operate in the field.

Approximately 6 years ago Thermo Fisher introduced the Thermo Scientific TruNarc Handheld Narcotics Analyzer for police officers and drug investigators to use in their Presumptive Field Tests of suspicious substances.

The TruNarc analyzer enables the officer to accurately and safely identify a wide range of narcotics, synthetic drugs, precursors and cutting agents by simply aiming and shooting a Raman technology laser into the suspected chemical powder, liquid, solid or tablet/pill. In most cases, within seconds the TruNarc analyzer can identify a controlled or illegal drug, a precursor chemical or a chemical adulterant (cutting agent).

Currently, the TruNarc analyzer is used by state and local police officers conducting drug interdiction on highways and drug investigations in 46 states in the United States. Federal Agencies and U.S. Customs are also using the TruNarc analyzer along the U.S. borders and major mail facilities to reduce the shipment of drugs being smuggled into our country. The federal agencies at borders and U.S. mail facilities use the TruNarc analyzer in combination with a Thermo Scientific Gemini Handheld Analyzer . The latter has two confirmatory technologies (Raman and FTIR) in the same instrument and thousands of items in its library. Internationally, over 50 countries also use the TruNarc analyzer in their narcotic and Customs investigations.



Fast and easy-to-use, the TruNarc detects a variety of drugs.

As use of TruNarc analyzers continues to grow, drug law enforcement is slowly gaining the advantage. The TruNarc analyzer has become an essential tool for the narcotic investigator. It is a resource that provides officers with valuable, accurate, real-time information that improves investigative efforts, efficiency and success.



Officers now can have confidence that they are standing on firm ground when they charge a suspect with possession of a particular drug.



Why Choose TruNarc:

- 1. Accuracy** - Raman Laser Technology was invented in the 1930's and the technology is still used by forensic drug laboratories today.
- 2. Ease of use** - A simple-to-use, three-button instrument which can be used by officers in the field without the need for calibration.
- 3. Inter-operability** - The most widely used Presumptive Field Test instrument in the U.S and the World. Officers from different agencies may work jointly using the same instruments and obtaining the same testing results.
- 4. Training** - Use of the same instrument promotes familiarity by a wide range of state, local and federal law enforcement agencies and simplifies the training of new officers who come into the drug unit.
- 5. TruNarc library** - Free library updates for the life of the instrument keep customers ahead of the curve with new, emerging synthetics.
- 6. TruNarc software** - Allows the user to print reports, conduct Reachback Requests and analysis of types of drugs tested.
- 7. Court/prosecution** - The use of the TruNarc analyzer by a wide range of law enforcement agencies familiarizes prosecutors with the instrument and its technology, capabilities and limitations. Prosecutors and judges who become familiar with one instrument accept the TruNarc analyzer and its proven accuracy as a presumptive test in court. Forensic Drug Labs have used Raman Technology to analyze submitted drug evidence for decades.
- 8. Reachback request** - If the item is not in the instruments library, the officer can send the suspected chemical spectrum to Thermo Fisher Scientific for identification and receive a response within an hour. This service is provided on a 24/7 basis to TruNarc users.
- 9. Customer support** - Thermo Fisher Scientific provides award-winning Customer Support to its U.S. and global customers. Customer Service stations are based in the U.S.
- 10. Familiarity** - The investigators, forensic drug labs and the prosecutions all benefit from the use of the TruNarc analyzer, which become the standard for drug identification in the field.
- 11. Unmatched partnership** - Thermo Fisher Scientific with its 70,000 employees has the resources to provide continuing research and development, unmatched product development and improvements and support to officers/investigators in the field.

Find out more at thermofisher.com/trunarc

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