Garden State CLE presents:

Fake and Phony:
Challenging False Scientific Evidence in DWI and Drug Cases

Lesson Plan

Part I – Background: Little Falls Lab Scandal

SCANDAL

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lieutenant Governor

State of New Jersey
OFFICE OF THE ATTORNEY GENERAL
DEPARTMENT OF LAW AND PUBLIC SAFETY
DIVISION OF CRIMINAL JUSTICE
PO BOX 085
TRENTON, NJ 08625-0085
TELEPHONE: (609) 984-6500

JOHN J. HOFFMAN
Acting Attorney General

ELIE HONIG
Director

February 22, 2016

All County Prosecutors
Division of Criminal Justice
Gangs/Organized Crime Bureau
Specialized Crimes Bureau

RE: Disclosure Regarding a Forensic Scientist

Dear Prosecutors/Deputy Attorneys General:

This letter is to inform you that recently Kamal Shah, a forensic scientist at the New Jersey State Police Office of Forensic Sciences, North Regional Laboratory - Drug Unit, failed to appropriately conduct laboratory analyses of evidence in a drug case. He was removed from case work analysis in December 2015. Mr. Shah was observed in one case spending insufficient time analyzing a substance to determine if it was marijuana and recording an anticipated result without properly conducting the analysis.

In an abundance of caution, we believe that we have a duty to disclose this recently obtained information because the scientist participated in analyzing evidence and/or testified in drug cases from your counties or bureaus.

Please disclose this information to the defense in those cases that either your office or the Office of Forensic Sciences has identified as involving the scientist. The State Police Office of Forensic Sciences can provide a list of Mr. Shah's cases upon request.

Very truly yours,

Elie Honig
Director
Division of Criminal Justice

Northjersey.com - March 3, 2016

"Lab tech's suspension casts shadow over thousands of North Jersey drug cases"

By KIBRET MARKOS
STAFF WRITER |
The Record

Thousands of drug convictions and pending criminal cases across North Jersey could be thrown into doubt after state authorities suspended a longtime state police lab technician in Little Falls who they say failed to properly analyze drug evidence in at least one case.

The revelation enables defendants in pending criminal cases to file motions to dismiss charges, and cases that already have been resolved in court could be appealed or retried, state officials said. In question are more than 7,000 cases the technician handled in the last decade.

The state Attorney General's Office last week notified all county prosecutors in the state that the technician, Kamal Shah, "failed to appropriately conduct laboratory analyses of evidence in a drug case." That failure, officials said, was enough to cast doubt on his handling of every case in his care.

“Mr. Shah was observed in one case spending insufficient time analyzing a substance to determine if it was marijuana and recording an anticipated result without properly conducting the analysis,” said the Feb. 22 letter, written by Elie Honig, director of the Division of Criminal Justice at the Attorney General’s Office.

“We believe that we have a duty to disclose this recently obtained information because the scientist participated in analyzing evidence and/or testified in drug cases from your counties or bureaus,” Honig said in the letter.

In Shah’s 10 years at the Little Falls forensic lab, he worked on a total of 7,827 drug cases, said Peter Aseltine, spokesman for the state Attorney General’s Office.

Shah has been employed as a forensic scientist for the state since October 1989 and began working at the Little Falls lab in 2005. He was removed from the job on Dec. 10, 2015, when the problem was discovered, and was suspended without pay effective Jan. 12, Aseltine said. His annual salary was $101,039, Aseltine said.

No charges have been filed against Shah. Aseltine said he could neither confirm nor deny whether Shah is facing a criminal investigation.

Although Honig’s letter refers to one case, defense lawyers and judicial officials said his actions and his subsequent removal from the lab could have an impact on the thousands of cases in which he prepared lab reports that were used as evidence in court.

In one internal memo dated Monday, a senior Passaic County public defender wrote that “the universe of cases possibly implicated in this conduct [in Passaic County] is 2,100.” The public defender, Judy Fallon, added, “Obviously, all his results have been called into question.”

Fallon also wrote that Shah was basically “observed writing test results for suspected marijuana that was never tested.”

Ernest Caposela, the assignment judge in Passaic County, said Wednesday that defendants who could be affected fall into at least three categories: Those whose cases are pending; those who have been convicted and are serving sentences; and those who were convicted and finished serving their terms.

“The ones who are of most concern are those who are incarcerated, either awaiting trial or who have been convicted and are serving sentences,” Caposela said.

In pending cases, the samples can be resubmitted for testing to verify the results, he said.

In cases in which the defendant was convicted and is serving a sentence, resubmitting the sample may be impossible because samples often are destroyed after the case is resolved. Defense lawyers, however, will have the option to file appeals or seek new trials without the use of the questionable lab report.

“At this point, we are waiting for the prosecuting attorneys to identify the cases in which this laboratory technician was involved,” Kevin Walker, spokesman for the state’s Office of the Public Defender, said Wednesday.

“Pending that review, we are going to keep all our options on the table, including filing motions to vacate convictions in appropriate cases,” Walker said.

Caposela said it is not clear what remedy would be available to those who have already been convicted and have finished serving their sentences.

Honig’s letter instructs county prosecutors to disclose Shah’s removal to defense attorneys in cases in which his lab reports may have been used.

Passaic County Prosecutor Camelia Valdes declined to comment Wednesday and referred all questions to the state Attorney General’s Office.

Fallon, the Passaic County public defender, said in the internal memo that the Passaic County Prosecutor’s Office is still in the process of identifying the cases in which Shah was involved.

“Their plan is to submit for retesting specimens from open cases,” she wrote. “The larger, and unanswered, question is how this impacts already resolved cases, especially those where the specimens may have been destroyed.”

Acting Bergen County Prosecutor Gurbir S. Grewal declined to comment on Wednesday beyond confirming that his office has been contacted by the Attorney General’s Office and that “the entire matter is presently under review.”

Bonnie Mizdol, the assignment judge in Bergen County, said she has been informed by Bergen County prosecutors that they might seek to postpone drug cases in which Shah’s lab reports are used. So far, only one adjournment has been requested, she said.

When a defendant is arrested on suspicion of drug possession, police officers will seize the item that is suspected of being an illegal drug and submit it to a state police lab for testing.

A lab technician will first inspect the suspected drug visually and weigh it, and then will conduct a chemical test to determine what kind of substance it is. If the technician determines that the substance is an illegal drug, he or she will place a label on the sample, and prepare a lab report indicating that the substance that was seized at the scene was indeed an illegal drug.

Shah is alleged to have labeled a sample as an illegal drug without running the proper test.

That lab report is often produced as evidence by prosecutors in drug cases, and very often, defense attorneys do not challenge it in court. It is usually “stipulated” into evidence once both sides agree to its authenticity.

“As a rule of practice, many of us don’t challenge it,” said Emile Lisboa, a Hackensack defense attorney who said he is handling close to 50 pending drug cases in which Shah’s reports have been offered as evidence.

Miles Feinstein, a Clifton defense attorney, said that that practice might change after the revelations about Shah.

“I think as a consequence of this, attorneys will be hesitant to stipulate state lab results, which will require lab technicians to testify in court,” Feinstein said. “That could delay trials and affect the system to a great extent.”

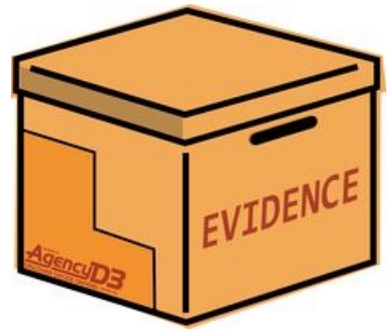
Lisboa said the state should consider bringing in an outside investigator to inspect the police lab where Shah worked, so that all parties can regain confidence in what the lab does in the future.

“There might be people who are sitting in jail with drug convictions because of this,” he said. “There are people who have been deported. There are people who lost their driver’s licenses and professional licenses,” he said.

Email: markos@northjersey.com

Part II

Previous examples of phony evidence



a.) State v. Gookins, 135 N.J. 42 (1994)

The official conduct which is the predicate of this appeal profoundly shocks the judicial conscience. It was a brazenly lawless attempt to seek a conviction at the expense of fundamental individual rights.

The objectivity, and hence the value, of the breathalyzer is irreparably undermined when the person operating the machine falsifies the results to fabricate evidence of guilt. The arresting officer in these three cases pleaded guilty to such fabrication in another drunk-driving case and has been implicated in similar misconduct in other cases. That misconduct compels us to vacate the guilty pleas and accompanying judgments of conviction in these three cases.

A more fundamental premise requires vacation of these pleas. Because public confidence in the criminal-justice system depends on the integrity of the courts, the prosecutors, and the police, the system can never disregard misconduct by such actors in the fulfillment of their public duties. In *Brady v. Maryland*, 373 *U.S.* 83, 83 *S.Ct.* 1194, 10 *L.Ed.*2d 215 (1963), the Court explained that corrective justice in such circumstances does not constitute "punishment of society for misdeeds of a prosecutor but avoidance of an unfair trial to the accused. Society wins not only when the guilty are convicted but when criminal trials are fair; our system of the administration of justice suffers when any accused is treated unfairly."

Prosecutors are ethically bound to do justice:

"The * * * [prosecuting] Attorney is the representative not of an ordinary party to a controversy, but of a sovereignty whose obligation to govern impartially is as compelling as its obligation to govern at all; and whose interest, therefore, in a criminal prosecution is not that it shall win a case, but that justice shall be done."

Thus, a prosecutor cannot strike a foul blow against a defendant by offering tainted evidence. Courts are similarly obliged. "[C]ourts may not abide illegality committed by the guardians of the law. To do otherwise "would erode public confidence in the impartiality and fairness of the judicial process. A guiding principle in these appeals is that the judiciary is obliged to "`preserve public confidence' in the administration of justice."

Note Court's rejection of the use of NJRE 404(b) (other bad acts) as part of the defense case as had been ordered by the Appellate Division.

See also RPC 3.8 on prosecutor's obligation to do justice – also see Supreme Court comment to Plea Bargaining Guidelines - Appendix to Part VII Rules of Court.

b.) Other examples:
State v. Sugar, 84 NJ 1 (1980) (Police eavesdropping on conversations between attorney and client results in suppression of witness and testimony)

State v. Dickerson, 268 N.J. Super. 33 (App. Div. 1993) (Police officer made up breath test readings, solicited bribes, theft)

State v. Michaels, 136 N.J. 299 (1994) (incompetent, highly suggestive and fraudulent prosecution interviews of purported child victims of sexual abuse)

State v. Behn, 375 N.J.Super. 409 (App. Div. 2005) (composition bullet lead analysis debunked scientifically following conviction)

State v. Parsons, 341 N.J.Super. 448 (App. Div. 2001) (Prosecutors hid evidence that officer who recovered drug evidence was under criminal investigation for drug offenses.)

c.) Two tests for judicial relief

a.) New trial based upon newly discovered evidence - State v. Carter, 85 NJ 300, 314 (1981) (Carter III)

It requires a defendant to show that the newly discovered evidence:

(1) was discovered after the trial and was not discoverable by reasonable diligence at the time of trial;

(2) is material to the issue and not merely cumulative, impeaching or contradictory; and

(3) would probably change the jury's verdict if a new trial is granted.

d.) Entitlement to exculpatory evidence under Brady v. Maryland, 373 US 83 (1963), use the three-part test set forth under Moore v. Illinois, 408 US 786 (1972) (See State v. Parsons, 341 N.J.Super. 448 (App. Div. 2001).

It requires proof that:

(1) the prosecutor failed to disclose the evidence;

(2) the evidence was of a favorable character to the defendant; and

(3) the evidence was material.

Part III – Pre-trial Procedures

a.) Requiring all the technical and scientific witnesses to testify at trial.

Technically, the results of most scientific testing in drug and DWI cases can be entered into evidence by way of certificate. See NJSA 2C:35-19. Under *N.J.R.E.* 803(c)(8). *and* State v. Matulewicz, 101 N.J. 27, 31-32 (1985) a State Police chemist's laboratory report identifying a controlled dangerous substance may be admitted, in proper circumstances, as either a business record or a public record under former

However, laboratory results are also considered to be testimonial within the meaning of Crawford v. Washington, 541 US 36 (2004) and thus must be excluded unless defendant has an opportunity to cross-examine the chemist. State v. Berezansky, 386 N.J.Super. 84 (App.Div.2006)

Accord as to testimonial nature of forensic evidence:

Melendez-Diaz v. Massachusetts, 129 S.Ct. 2527 (2009)
Bullcoming v. New Mexico, 131 S. Ct. 2705 (2011)

But for testimony of lab supervisor in place of technician:

State v. Rehman, 419 NJ Super. 451 (App. Div. 2011)
State v. Michaels, 219 NJ 1 (2014)
Williams v. Illinois, 132 S. Ct. 2221 (2012) (plurality)

The case law requires advance notice to prosecutor.

State v. Kent, 391 N.J.Super. 352, 381-383 (App. Div. 2007)

We deem it appropriate prospectively to require, as a condition of our treatment of lab reports and blood sample certificates as "testimonial" documents, that defense counsel provide reasonable advance notice to prosecutors that they wish to cross-examine the authors of those documents at trial. In the absence of such reasonable notice, a defendant shall be deemed to have waived his or her right to confrontation.

Thus, [a] DWI defendant must give the prosecution appropriate notice of his or her invocation of the constitutional right of confrontation, and must timely demand the appearance of persons who prepare laboratory reports and blood certificates sought to be admitted by the State. Absent such notice and demand, the constitutional right should be deemed waived.

b.) Specific *Shah* discovery demand

LAW OFFICES
BRIAN J. NEARY
21 Main Street, Suite 305A
Court Plaza South, East Wing
Hackensack, New Jersey 07601
(201) 488-0544
Attorney for Defendant

STATE OF NEW JERSEY,	**:**	**SUPERIOR COURT OF NEW JERSEY**
	:	**LAW DIVISION: HUDSON COUNTY**
Plaintiff,	**:**	
	:	**INDICTMENT NO.**
v.	**:**	
	:	**CRIMINAL ACTION**
Sample Pleading,	**:**	**NOTICE OF MOTION**
	:	**FOR ADDITIONAL DISCOVERY**
Defendant.	**:**	**IN RE FRAUDULENT LAB TESTING**
	:	**BY THE NEW JERSEY STATE POLICE**
	:	**LABORATORY**

HON. MITZY GALIS-MENENDEZ, J.S.C.
CRIMINAL CASE MANAGER
HUDSON COUNTY SUPERIOR COURT
595 NEWARK AVENUE
JERSEY CITY, NJ 07306

GEORGINA ONMYMIND, ASSISTANT PROSECUTOR
HUDSON COUNTY SUPERIOR COURT
595 NEWARK AVENUE
JERSEY CITY, NJ 07306

PLEASE TAKE NOTICE that at a time and date to be set by the Court, that the undersigned attorney for the Defendant, Donald Sample Pleading, will move before the Honorable Mitzy Galis-Menendez, J.S.C., Hudson County Superior Court located at Jersey City, New Jersey, for:

An Order compelling additional discovery relative to the procedure, competency, efficacy and accuracy of the lab testing procedures and personnel with regard to the testing procedure alleged in the discovery previously provided.

The following discovery is demanded:

I. DOCUMENTS

A. Documents on each and every analysis, standard, and control run in the series of runs involving analysis of the presence of controlled dangerous substances, including:
(i) N.J.S. 2C:35-19a state forensic laboratory designation;
(ii) documents generated for laboratory proficiency testing;
(iii) N.J.S. 2C:35-19b laboratory employee certificate;
(iv) N.J.S. 2C:35-19c notice of intent to proffer, if any;
(v) each and every analysis, standard, and control run in the series of runs involving analysis of the presence of controlled dangerous substances, including color tests, chromatographic results, gas chromatography ["GC"] printouts, mass spectrometer ["MS"] printouts, printouts from any other analytical device ["AD"];
(vi) chemist's notes;
(vii) GC/MS/AD service records, if any;
(viii) GC/MS/AD calibration curves, mass spectra and library spectra used to identify each such sample, if any;
(ix) quality control manual;
(x) testing procedures; and
(xi) custody documents for the samples tested.
(xii) which samples, as well as the above discovery with regard to any samples where Kamal Kant Shah was the analyst, were run through the GC / MS / AD at the same time as the sample run by the analyst in this matter.
(xiii.) Copies of all files / lab results / reports that the peer review person in this matter served as either the peer review and/or supervisor review person for analyst Kamal Kant Shah.

B. Copies of all files / lab results / reports that the supervisor review person in this matter served as either the peer review and/or supervisor review person for analyst Kamal Kant Shah.

C. Production of the unused alleged control dangerous substance for analysis or a statement why the substance cannot be produced and if destroyed- when and by what agency.

D. Copies of all files / lab results / reports that the analyst in this matter served as either the peer review and/or supervisor review person for analyst Kamal Kant Shah.

E. Copies of any and all protocols and directives relative to the retention and destruction of controlled dangerous substances by the prosecutor's office, the police agency or lab responsible for the retention and destruction of said evidence.

F. Copies of all lab reports for test / analysis conducted by the anylyst, on the same day as the analysis he/she conducted in defendant's matter.

II. ELECTRONIC DISCOVERY

Demand is made for electronic Discovery. This includes, but is not limited to, email and other electronic communication, word processing, documents, spreadsheets, GC, MS, AD, databases, calendars, telephone logs, contact manager information, Internet usage files, and network access information, and data stored in the "cloud," or other on-line storage device.

Electronic Files.

A. Active data (i.e., data immediately and easily accessible on the State Police Lab 's systems today);
B. Archived data (i.e., data residing on backup tapes or other storage media);
C. Deleted data (i.e., data that has been deleted from a computer hard drive but is recoverable through computer forensic techniques); and
D. Legacy data (i.e., data created on old or obsolete hardware or software).
E. The State Police must preserve and produce active, archived and legacy data including but not limited to:

1. **Word-processed files, including drafts and revisions;**
2. **Spreadsheets, including drafts and revisions;**

3. Databases;
4. CAD (computer-aided design) files, including drafts and revisions;
5. Presentation data or slide shows produced by presentation software (such as Microsoft PowerPoint);
6. Graphs, charts and other data produced by project management software (such as Microsoft Project);
7. Animations, images, audio, video and audiovisual recordings, MP3 players, and voicemail files;
8. Data generated by calendaring, task management and personal information management (PIM) software (such as Microsoft Outlook or Lotus Notes);
9. Data created with the use of personal data assistants (PDAs), such as PalmPilot, HP Jornada, Cassiopeia or other Windows CE-based or Pocket PC, Apple I-Pad, Pod and Phone devices or tablet etc.;
10. Data created with the use of document management software; and
11. Data created with the use of paper and electronic mail logging and routing software.

F. The State Police Lab must provide and preserve media used by the State Police computers including but not limited to:

1. Magnetic, optical or other storage media, including the hard drives, external drives, and floppy disks used by State Police Lab computers;
2. Backup media (i.e., other hard drives, backup tapes, floppies, Jaz cartridges, external drives CDROMs) and the software necessary to reconstruct the data contained on the media;

and

3. Archived media (you should retain a mirror image copy of any media no longer in service but used during the following time periods): January 1, 2005 thru March 16, 2016.
4. Cloud storage data or other internet based storage application utilized by the State Police Lab.

(1) Hardware. Demand is made for the production and preservation of an imaged copy of all electronic processing systems, even if they were or are replaced. This includes computer servers, stand-alone personal computers, hard drives, laptops, PDAs, I-Pads, tablets, smartphones and other electronic processing devices. State Police should retain copies of any hardware no longer in service but used during the following time periods: January 1, 2005 thru March 16, 2016, for hardware utilized by the analysts in this case, the peer review person, the supervisor and Kamal Kant Shah.

(2) Emails. Demand is made for the production and preservation of all potentially relevant internal and external emails that were sent or received. Email must be provided and preserved in electronic format, regardless of whether hard copies of the information exist.

(3) Internet Web Activity. Demand is made for the production and preservation of all records of Internet and Web-browser generated files in electronic format, regardless of whether hard copies of the information exist. This includes Internet and Web-browser-generated history files, caches and "cookies" files stored on backup media or generated by an individual employed at New Jersey State Police Lab.

(4) Activity Logs. Demand is made for the production and preservation of all hard-copy or electronic logs documenting computer use by the Analyst in this case as well as the peer review person, supervisor person, certification/notary person and Kamal Kant Shah.

(5) Supporting Information. State Police must preserve all supporting information relating to the requested electronic data and/or media including:

A. Codebooks, keys, data dictionaries, diagrams, handbooks, manuals or other supporting documents that aid in reading or interpreting database, media, email, hardware, software, or activity log information.

III. INFORMATION FOR EMPLOYEES.

Demand is made for a list of employees at the State Police Lab and former employees who would be likely to have relevant information with regard to any of the above referenced discovery, including but not limited to the production and preservation all data that contains the information described below for the following employees:

A. The Analyst or Analysts performing the alleged examination in the present matter;
B. The initials / signature of the peer reviewer is unintelligible please provide a full name, identity and CV of this individual;
C. The initials / signature of the supervisor reviewer is unintelligible please provide a full name, identity and CV of this individual;
D. Copies of all files / lab results / reports that the analyst in this matter served as either the peer review and/or supervisor review person for analyst Kamal Kant Shah.
E. The certificate appears to be "certified" by a notary public, please provide a copy of the notary's certificate of commission for all commissions between January 1, 2005 and December 21, 2015. N.J.S.A. 52:7-16.

(i) **The identity of any other names or aliases used by the notary between January 1, 2005 and December 21, 2015, as well as a copy of the statement if any filed with the state of New Jersey. N.J.S.A. 52:7-18.**

(ii) **Copy of the Notary's log book(s) for the time period of January 1, 2005 through December 31, 2015 for all: Oaths and Affirmations; Acknowledgments; Proofs of Execution; Jurats; Protests For Non-Payment – Non-Acceptance.**

F. **Basic employee information including name, date of birth, social security number, employee identification number, date hired (or re-hired), and educational background for all present and former employees of the State Police Lab for the time periods January 1, 2005 through December 31, 2015;**

G. **Employment performance evaluations or reviews for the analyst, the peer review person and the supervisor and Kamal Kant Shah;**

H. **Copies of any and all internal test / exams taken by the analyst, the peer review person and the supervisor and Kamal Kant Shah as well as their scores, pass/fail rate for said tests as well the identity of the persons grading and/or reviewing said tests or exam ;**

I. **All information, including W-2 forms, relating to compensation (including salary, bonuses, over-time, merit and/or other forms of compensation) for the analyst, the peer review person and the supervisor and the notary certification / person and Kamal Kant Shah;**

J. **The personnel records of the persons: 1. conducting the alleged analysis; 2. for the peer review person; 3. For the supervisor person; 4. for the certifier/notary person as well as all persons representing the chain of custody for said evidence from the time of the state's possession of same until today.**

K. **For each position held by the employee during January 1, 2005 through December 31, 2015 list the job title/ position, salary level, function or description, location, division, department, subsidiary, time in position, and job status (covered or not covered), and whether the employee was full-time, part-time or temporary;**

L. **Any disciplinary action or employment contract violations by any employee at the state police lab for the period of January 1, 2005 through December 31, 2015; and If the individual is a former employee, list the data of departure and reason for leaving.**

M. Provide the actual number of completed test results / analyses performed by the Anylst in the defendant's matter for twelve (12) months prior to the test / analysis conducted in the present matter.

N. Provide the actual number of completed tests that each analyst employed at the lab actually conducted for twelve months (12) months prior to the date the analysis was performed in the defendant's matter.

IV. OTHER RELEVANT INFORMATION

A. Documents relating to computer systems, programs, software, hardware, materials, tools or information that State Police uses or used to track, monitor or prevent "dry labing", false test results or erroneous results either by human error, computer error or act of god.

B. Identity of the providers of chemical, testing regents and other products relative to the testing of controlled dangerous substances the State Police Lab.

C. **Chain of Custody. For each piece of media that prosecutors office, state police preserves- the prosecutor's office and the state police lab must document a complete chain of custody. Chain of custody documentation must indicate where the media has been, whose possession it has been in, and the reason for that possession.**

D. **Electronic Data Created after this motion. For any electronic data created after this motion or for any electronic processing systems used after this request and demand the prosecutor's office and state police lab must take the proper steps to avoid destroying potentially relevant evidence. This includes following the above preservation demands and requests.**

Defendant reserves the right to amend his discovery demand and production.

LAW OFFICES OF BRIAN J. NEARY

_____

S. EMILE LISBOA IV, ESQ.

DATED: 3/16/16

CERTIFICATION OF MAILING

I hereby certify that the within Notice of Motion was sent to the above captioned individuals on this date.

LAW OFFICES OF BRIAN J. NEARY

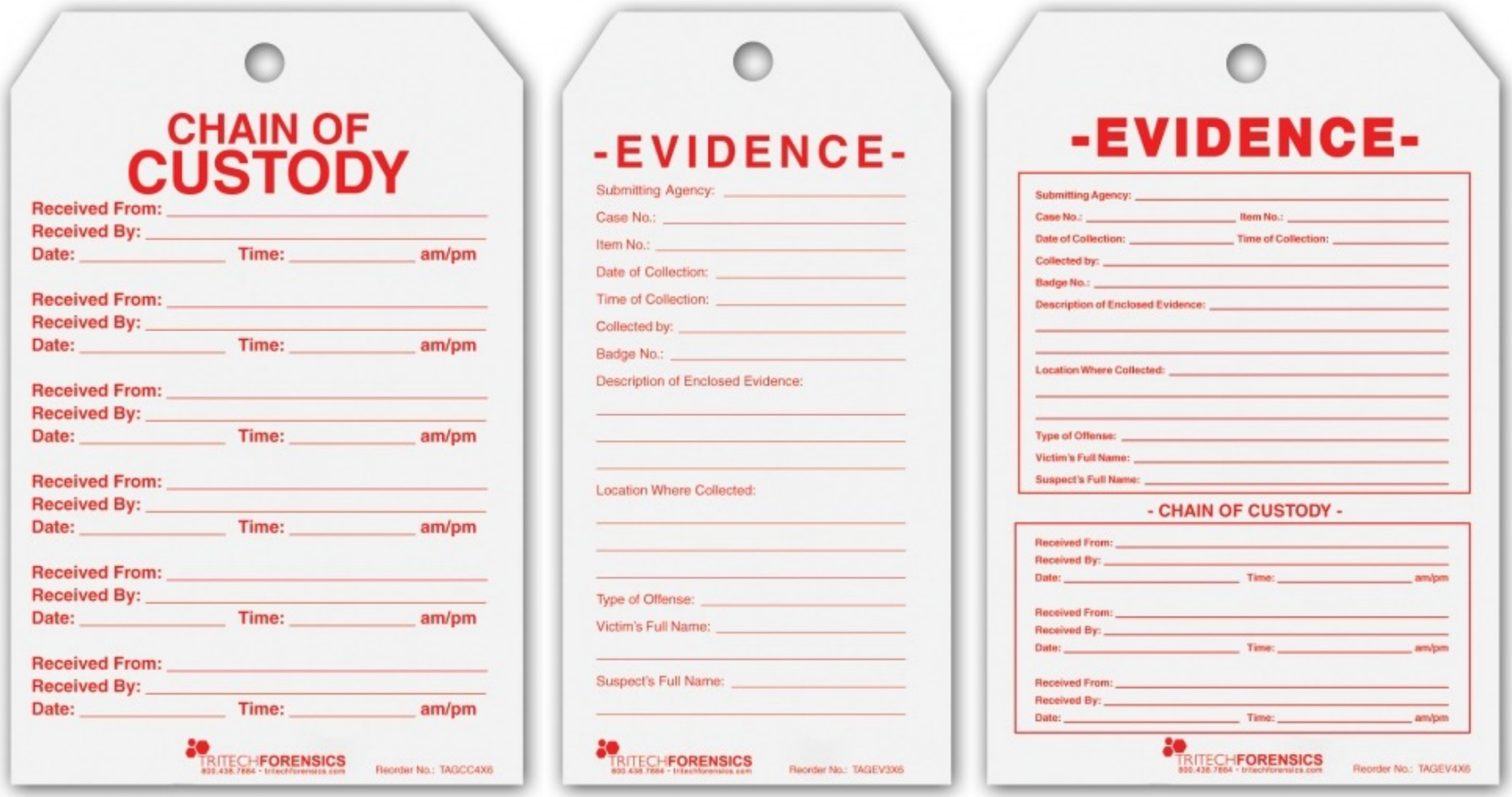
_____

S. EMILE LISBOA IV, ESQ.
Attorney for Defendant

DATED: 3/16/16

c.) Examine chain of custody for gaps or contamination

Under NJRE 901, chain of custody is a method of authentication. It provides an evidentiary link between the forensic evidence and the client. Evidence is not relevant without chain of custody.



See State v. Mosner, 407 NJ Super 40 (App. Div. 2009)

"The requirement of authentication or identification as a condition precedent to admissibility is satisfied by evidence sufficient to support a finding that the matter is what its proponent claims." *N.J.R.E.* 901. "A party introducing tangible evidence has the burden of laying a proper foundation for its admission." This foundation should include a showing of an uninterrupted chain of custody**. The determination of whether the State sufficiently established the** chain of custody **is within the discretion of the trial court.. Generally, evidence will be admitted if the court finds "in reasonable probability that the evidence has not been changed in important respects or is in substantially the same condition as when the crime was committed. [A] defect in the** chain of custody **goes to the weight, not the admissibility, of the evidence introduced.**

See also:

***State v. Morton, 155 N.J. 383, 446 (1998)*.**

d.) Rogue Breath-testing devices

Generally speaking, the use of portable-breath testing units is illegal in New Jersey.

1. Results are generally kept secret (*Brady* masterials)
2. No reading of paragraph 36
3. No proof in case law of scientific reliability (Frye v. United States, 293 F. 1013 (D.C.Cir.1923);
4. Engenders confusion among defendants (refusals)
5. Often used to confirm odor of alcohol which is subject to lay opinion.
6. Not approved by AG by statute or NJAC.

Section: 39:4-50.3: Method of analyses; approval of techniques; certification of analysts; reports; forms

Chemical analyses of the arrested person's breath, to be considered valid under the provisions of this act, shall have been performed according to methods approved by the Attorney General, and by a person certified for this purpose by the Attorney General. The Attorney General is authorized to approve satisfactory techniques or methods, to ascertain the qualifications and competence of individuals to conduct such analyses, and to make certifications of such individuals, which certifications shall be subject to termination or revocation at the discretion of the Attorney General. The Attorney General shall prescribe a uniform form for reports of such chemical analysis of breath to be used by law enforcement officers and others acting in accordance with the provisions of this act. Such forms shall be sequentially numbered. Each chief of police, in the case of forms distributed to law enforcement officers and others in his municipality, or the other officer, board, or official having charge or control of the police department where there is no chief, and the Director of the Division of Motor Vehicles and the Superintendent of State Police, in the case of such forms distributed to law enforcement officers and other personnel in their divisions, shall be responsible for the furnishing and proper disposition of such uniform forms. Each such responsible party shall prepare or cause to be prepared such records and reports relating to such uniform forms and their disposition in such manner and at such times as the Attorney General shall prescribe.

§ 13:51-3.5 Approved methods of chemical breath testing and approved instruments for the testing of a person's breath by chemical analysis

(a) The Attorney General, pursuant to P.L. 1966, c.142, Sec. 3, as amended by P.L. 1971, c.273, Sec. 1 (N.J.S.A. 39:4-50.3), P.L. 1990, c.103, Sec. 17 (N.J.S.A. 39:3-10.25) and P.L. 1986, c.39, Sec. 8 (N.J.S.A. 12:7-56) and this subchapter, approves the following methods of chemical breath testing and the following instruments for use in the testing of a person's breath by chemical analysis.

1. Photometry is approved as a method of chemical breath testing.

i. The Breathalyzer, Model 900, is a Photometric instrument and is an approved instrument for use in the testing of a person's breath by chemical analysis.

ii. The Breathalyzer, Model 900A, is a Photometric instrument and is an approved instrument for use in the testing of a person's breath by chemical analysis.

iii. The Dominator Albreath is a Photometric instrument and is an approved instrument for use in the testing of a person's breath by chemical analysis.

2. Infrared analysis and electrochemical analysis, when utilized in a single approved instrument as a dual system of chemical breath testing, is approved as a method of chemical breath testing.

i. The Alcotest 7110 MKIII, is a chemical breath test instrument which employs both infrared analysis and electrochemical analysis as a dual system of chemical breath testing and is an approved instrument for use in the testing of a person's breath by chemical analysis.

e.) Other novel scientific tests & devices

Absent a determination of scientific reliability by the Appellate Division or our Supreme Court, the trial courts in this State are not at liberty to admit evidence of newly-devised scientific technology unless the general acceptance thereof is demonstrated by expert testimony, authoritative scientific and legal writings or judicial opinions. ***See generally*** **State v. Harvey, 151 N.J. 117, 166-176 (1997).**

Part IV – Challenges at Trial

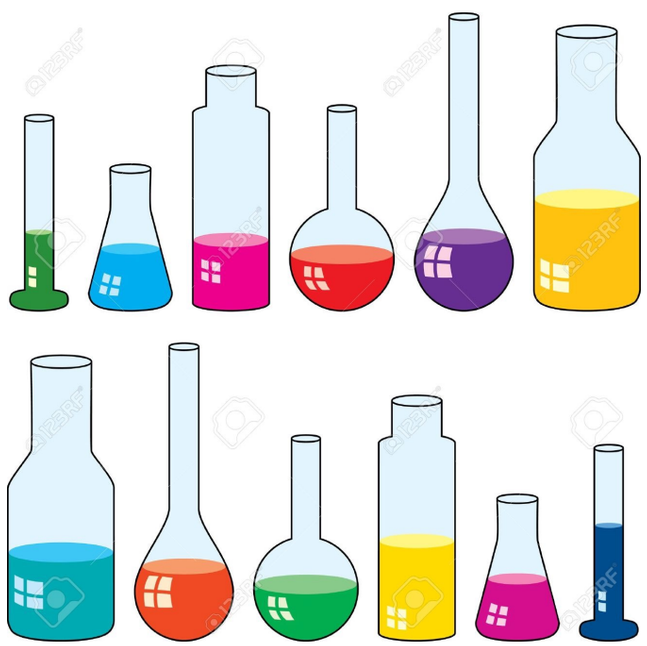
a.) Dry Labbing

THE "HOW" AND "WHY" OF THE CURRENT SCANDAL

"Dry labbing" occurs when an assigned analyst attests to the quantitative and/or qualitative analytical result of testing for an analyte of interest without any testing at all. In other words, the analyst fails to test, lies about a result, and generates a "lab result" document to confirm his fraud. This is precisely what happened in the NJSP Little Falls lab.

The current dry labbing scandal emphasizes the need to change the way that the NJ state labs currently test for the presence of marijuana. Absent the use of an analytical chromatograph (GC/MS), the qualitative testing of marijuana has always been a lab challenge. All other available non-GC/MS marijuana testing methods are non-specific (scientifically not definitive) by themselves. The current testing method is not truly a "validated" one as defined by scientific principles; that is, the results are not reviewable, repeatable, or verifiable by a fellow analyst or supervisor.

The analyst performs a microscopic exam and a color test—neither of which are documented. We are forced to simply take the analyst's word for it that the analysis was actually performed. That is why NJSP qualitative marijuana testing is currently susceptible to fraud. There is no external way that a supervisor, an accrediting agency or defense attorney can prove whether the analyst did the work. The fraud will go undiscovered unless literally witnessed and reported by a fellow bench analyst in the laboratory. An internal or external audit of testing records will reveal nothing: there are no physical results to review, to repeat, or to verify. Proficiency testing of the analyst will not reveal fraud either. The analyst may test proficiently when audited, but continue to lie about their regular casework.



NJSP'S CURRENT METHOD FOR MARIJUANA TESTING

Here is a condensed summary of how the NJSP lab currently tests for marijuana:[1]

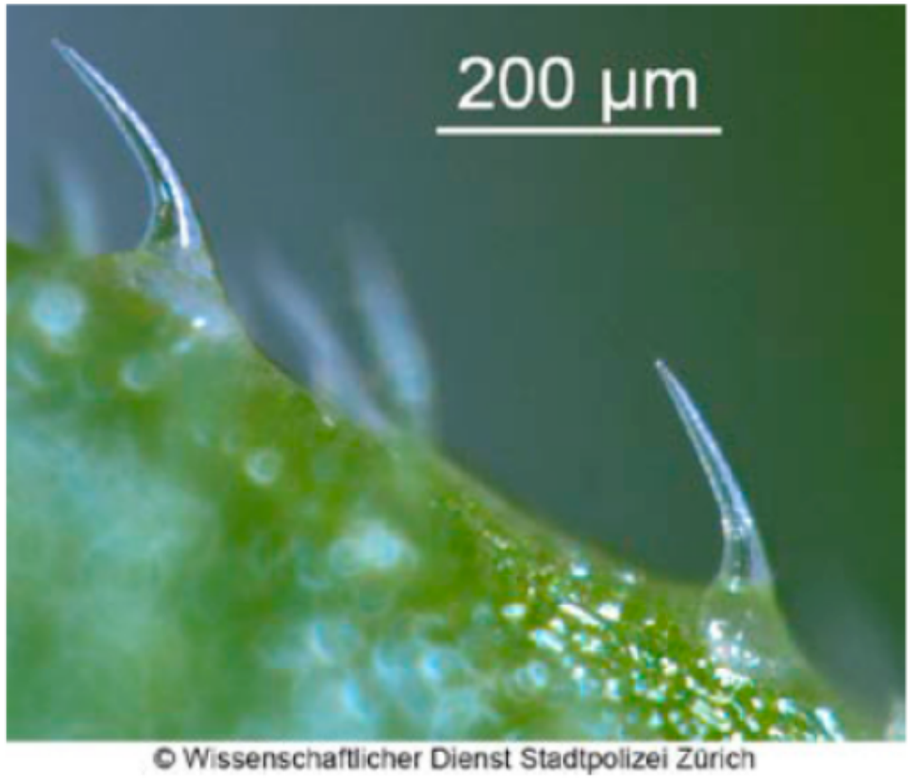
1. **A preliminary visual examination;**
2. **Weighing and/or measuring (quantitative testing);**
3. **Microscopic examination (qualitative testing);**
4. **Duquenois-Levine (modified) color test (qualitative testing).**

The microscopic exam is a morphological one. That is, the analyst is looking for certain characteristic botanical features--glandular hairs called cystolithic trichomes, stalked glandular trichomes and sessile glands. These glandular hair characteristics appear on cannaboids and other botanical species as well. Therefore, the microscopic exam is non-exclusive and non-specific. It's non-exclusive because it doesn't test for marijuana to the exclusion of everything else in the universe. It's non-specific because it is prone to false positive results. Whatever the analyst sees, it's not documented or photographed. They analyst simply writes what he saw on a piece of paper (toxicology worksheet) and discards the sample.

---

[1] See my separate memorandum regarding NJSP Drug Testing Manual Version (v. 2015 04/15).

Here are some pictures of these morphological features:

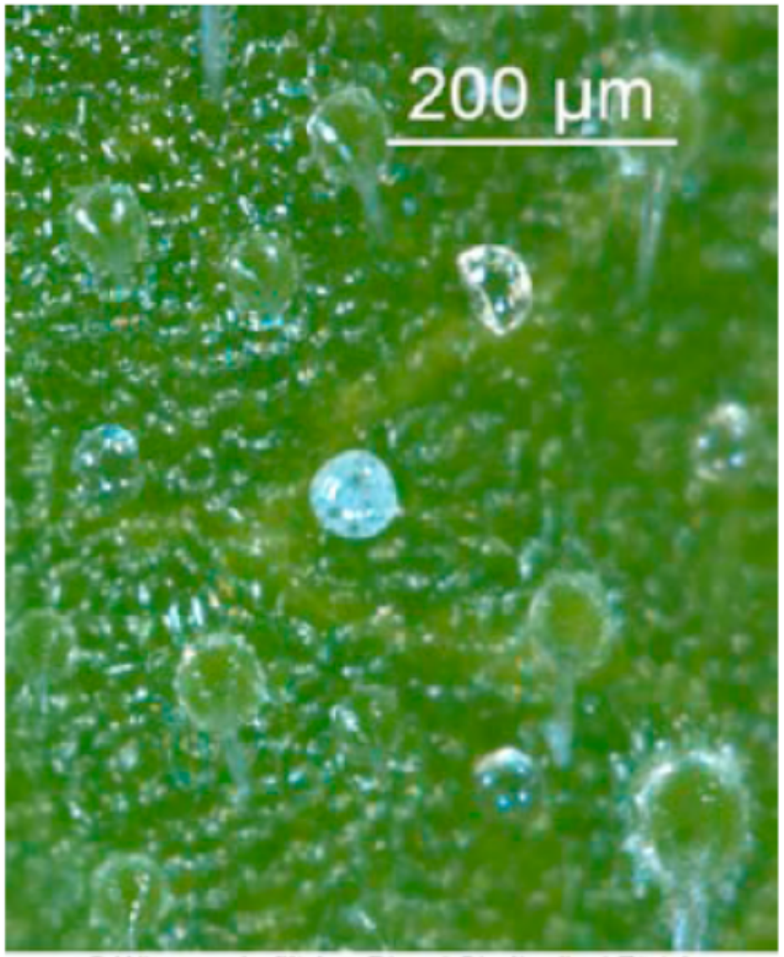


Cystolithic trichomes

Non-cystolithic trichomes

2

[2] Pictures courtesy Justin McShane, Esq.



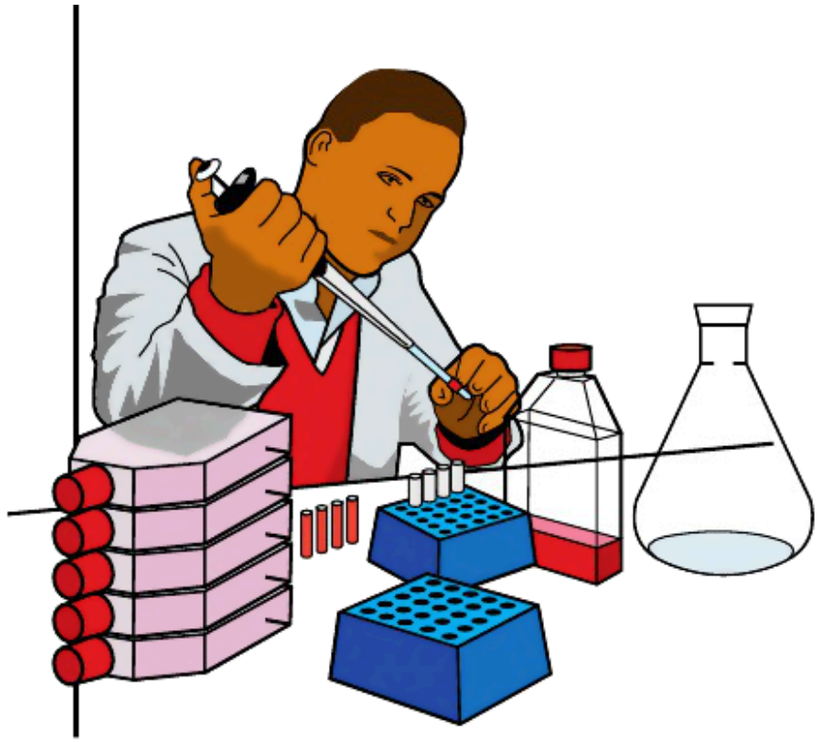
Sessile glands

Stalked glandular trichomes

Is it possible that a forensic lab examiner, after having detected the presence of these features, can attest that what he is seeing is marijuana to the exclusion of all other plant material? No. According to scientific articles (ex: Thorne), 199,350 other plants exist that possibly share similar botanical characteristics similar to marijuana. So, in the absence of GC/MS testing, the lab needs some combination of additional testing to corroborate these non-specific findings and raise the odds that the initial qualitative expression is accurate.

The analyst then performs a "confirmatory test". This is a colorimetric test. The analyst is looking for a color change after adding a reagent to another representative sample of the analyte of interest. This representative sample from the unknown is typically placed into a test tube. A specific amount of the Duquenois reagent is added (typically about 10 drops). The tube is closed. The tube is agitated (shaken) for an unspecified period. The tube is reopened. Concentrated hydrochloric acid is then added (usually about 20 drops). The tube is closed. It is agitated (shaken) again. Any color change is then noted. The color change is not photographed or otherwise memorialized except by the lab notes indicating the analyst's subjective evaluation of the both the color and degree of change in the test tube. Once again, we must take the analyst's word for it.

The tube is reopened. Chloroform is added. The tube is closed again. It is agitated (shaken) or vortexed (mixed). The analyst is looking for an additional color change (thought to be violet or purple) and a separation into two layers. It's not just the presence of separation; it's the dynamic of how the contents of the testing tube separate. Once again, the only documentation of the end result is the lab technician's notes. No photos are taken and the contents of the tube are discarded at the end of the test.



The above photo depicts the end result of a “positive” modified Duquenois-Levine test. This picture was taken after the HCl and the chloroform were added. There is a deep purple color at the top and a pink color at the bottom: all subjective observations.

Is this a repeatable test (i.e. validated) as contemplated by the scientific method? No. Except by pure statistical chance, a different analyst cannot necessarily replicate the findings of the first analysis. Why? Two reasons. First, it's because there are no results to compare. The initial results are discarded and not memorialized. The tested sample is also discarded. Second, humans perceive color in different, subjective ways. Each analyst has their own color interpretation. Studies indicate that a number of substances which "gave a red to blue chloroform solution which, without careful observation of the speed and sequence of color development after the addition of the acid, may be difficult to distinguish from the cannabis color. None of these materials gave precisely the same color behavior as fresh cannabis, but most could not be readily distinguished from the reaction with old, or trace amounts, of cannabis." This colorimetric test is grossly susceptible to non-specific ("false positive") results.

In the absence of GC/MS testing for the presence of THC, The Scientific Working Group for the Analysis of Seized Drugs (SWGDRUG) suggests that a 3 test approach be used when analyzing an unknown as potential marijuana. Most states use the Thorton-Nakumura protocol. It requires a combination of microscopic exam, colorimetric testing (Duquenois-Levine), and thin layer chromatography. The point is that three (verifiable) tests are scientifically necessary. The NJSP Drug Procedure Manual lists five different procedures to test for the presence of marijuana. Within each procedure, however, only two techniques are utilized.[3] The NJSP lab uses only two techniques even though it

---

[3] See my separate memorandum regarding NJSP Drug Testing Manual Version 2015 (version 04/15).

currently has in its labs the technology to use a number of different 3rd techniques. Most states use the Thorton-Nakumura protocol. It requires a combination of microscopic exam, colorimetric testing (Duquenois-Levine), and thin layer chromatography.

SWGDRUG is not alone in its recommendation of a 3 test techniques. According to the United Nations Division of Narcotics' Drugs Recommended Methods for Testing Cannabis: "When possible, three entirely different techniques should be used, for example, color test and any two of the available chromatography techniques (TLC, GLC, or HPLC). The analysis of cannabis represents a special problem to the forensic chemist."

In summary, the NJSP labs currently use a two part non-verifiable testing method for qualitatively identifying marijuana. The labs ignore the UN and SWGDRUG guidelines which urge a 3rd test in the absence of gas chromatography. The labs are not using the readily available accurate, verifiable testing methods they are currently using for other drug analyses.

OPPORTUNITY FOR CHANGE

It's time for a better approach; one that is more accurate, virtually immune from analyst fraud, repeatable—and most important—verifiable by supervisors, external auditing, and defense experts.

What makes marijuana illegal to possess? Marijuana is illegal because it contains the pharmacodynamically psychoactive compound Delta-9 Tetrahydrocannabinol (THC). So why not just chemically test for the presence of THC? The NJSP labs already have this ability.

The method requires the use of a gas chromatography (GC) analytical device. It is an analytical separation device. THE NJSP labs collectively own dozens of GCs. The devices are widely used already in every NJSP lab for the testing of blood for the presence of alcohol (GC-FID). The devices are also widely used to test all other unknown seized drugs (GC-MS). The suffix "MS" signifies the type of detector used by the GC device for solid drug analysis.

The GC-MS is very specific and produces verifiable data. This instrument driven technique has been validated. If used in the validated manner, with a properly trained operator, utilizing proper sample collection, proper sample selection, proper sample preparation, proper instrumentation, and legitimate interpretation of the data, it will arrive at a valid result. Perhaps most important, the testing and results are documented. They can be independently reviewed. There is no requirement to simply "take the analyst's word for it." If there is anything that the abundance of recent lab scandals has shown us, it's that "taking the lab's word for it" is unacceptable.

When a laboratory analyst is proficiency tested on unknowns and then graded to see whether or not he or she can conduct a proper analysis of an unknown, the analyst uses GC-MS. Often, the NJSP lab purchases known "standards" from third party vendors. The lab will use GC-MS testing when it wants to check the legitimacy of these known standards it will use in subsequent testing it.

Ironically, before the NJSP lab is permitted to opine "No CDS Detected" in a marijuana vegetation case, it is required to perform additional analysis using the more definitive GC/MS instruments.[4] The hypocrisy is tangible: the NJSP labs use non-exclusive, non-specific testing to report "positive" findings if they get them; if they get "negative" results, they are then procedurally compelled to run the tests they should have run in the first instance.

Here's the bottom line: when the laboratory really wants to know or really needs to know whether or not something contains delta 9 THC, it uses the most specific device available that produces verifiable data, GC/MS testing. The verifiable data are the printouts that result from the analysis--called a Total Ion Current (TIC) chromatograms. The resulting TIC spectrum is compared against an adjudicated "known" that is produced by the National Institutes of Standards and Technology (NIST). When used properly, GC-MS is the worldwide gold standard for qualitative analysis of solid drug unknowns. There is a bit more sample preparation time than with the current marijuana testing methods—a small price to pay for verifiable accuracy and insulation from dry labbing.

Headspace Solid Phase Micro extraction (HS-SPME) can also readily be used for qualitative testing for Delta 9 THC. The NJSP labs currently have the ability to perform this test as well. It is a non-derivatization-based technique where there is an extraction from the solid dose itself. It is a more direct measure as one is not chemically changing the sample.

---

[4] See NJSP Drug Procedure Manual (v. 2015 04/15) p. 30

b.) Blood testing in DWI Cases

Cross examination issues taken from State v. Weller, 225 NJ Super. 274 (Law Div. 1986)

The New Jersey State Police has four forensic laboratories throughout the State with each having a technical supervisor. The toxicology unit of the laboratory performs the blood-alcohol analysis. At the present time, toxicology units at the laboratories throughout the State analyze approximately 1,200 blood-alcohol samples in a period of approximately six months. The tests are performed by forensic chemists who hold Bachelor of Science degrees with a minimum of 24 hours in chemistry. The examiners are constantly supervised and test results are checked by the unit supervisor. All forensic chemists receive a salary for their services and there is no pay incentive based upon the number of results favorable to the State.

In every case, the blood specimen is assigned a number upon its receipt at the laboratory and is then placed in a refrigerator. The failure to properly refrigerate would cause a loss of alcohol resulting in a reading more favorable to defendant.

The blood-alcohol analysis is performed on an instrument known as a gas chromatograph. The test is commonly known as the head space gas chromatography test and has been used for a number of years, not only in this State, but also in numerous other jurisdictions. In general, the test is performed by separating the volatile, ethyl alcohol, from the liquid and injecting it into the gas chromatograph. The volatile passes through an electrical detector in the instrument at a given time and the quantity would be recorded on a graph. The particular peak on the graph is converted to a blood-alcohol reading.

More specific, the examiner is required to measure a certain quantity of defendant's blood, usually one milliliter. To this the examiner adds the same quantity of an internal standard, in most cases isopropanol alcohol in water. That substance is placed in a sealed container and heated in a water bath at approximately 37 degrees centigrade until equilibrium is obtained and the volatile separates from the liquid into the head space provided. If for some reason equilibrium is not properly obtained or if the volatile is prematurely withdrawn, the amount of volatile would be reduced resulting in a reading more favorable to defendant. The volatile is removed from the head space with a syringe and injected into the gas chromatograph column. Once in the column, the volatile is carried by a carrier gas, ordinarily nitrogen, which takes it through an electrical detector at a given time. The electrical detector measures the molecules in the volatiles thereby giving a reading for both the ethyl alcohol and the internal standard. The respective readings are readily noticeable since the volatiles pass through the electrical detector at a known time.

The results of the test are depicted as peaks on a graph which are recorded when the detections are made by the gas chromatograph. The peaks shown on the graph include one for the time of injection, one for the ethyl alcohol reading and one for the internal standard reading. The peaks appear on the graph within a known tolerance and any deviation from that standard would immediately be an indication to the examiner that something went wrong with the test. Standard procedures require that the test be run twice and that the results of the test be within a specified standard of error. If they are not, an additional test is performed and the result which fails to conform to the specified standard of error is discarded. The lower of the two remaining results is reported.

The ethyl alcohol peak on the graph is converted into a blood-alcohol reading. This is customarily done by a computer but it also can be checked manually. The test results are also subject to being checked by the unit supervisor.

The accuracy of the gas chromatograph itself is further checked on the day the tests are to be performed by running an internal standard, measured in certain predetermined quantities, through the equipment on two separate occasions during the course of conducting the tests. Such tests will disclose any problem with respect to the speed of the carrier gas in the gas chromatograph. The results of the standard tests are recorded on graphs.

All of the standard graphs and the graphs of the test results are retained as a permanent record. That record can be interpreted by anyone familiar with the operation of the gas chromatograph. The test is therefore a classic example of an objective test. It is to be distinguished from a subjective test where the expert is called upon to make a visual inspection of various specimens and compare them. The test is so routine that it is hard to imagine how a particular examiner could have independent recall as to a specific test which may have been performed on a given day. As a final check on the test results, a computer, which converts the graph peaks to the test result, is programmed to look for mistakes which would appear in the form of inconsistencies in the test results.

Garden State CLE presents:

Fake and Phony:
Challenging False Scientific Evidence in DWI and Drug Cases

Lesson Plan