



FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

**Industrial Hygiene Assessment
of an Unoccupied Property
Resulting in the Discovery of an
Illegal Drug Laboratory
at**

**XXXXXXXXX Street
Aurora, CO**

Prepared for:
XXX Industries
1xxxx E xxxxxx Ave.
xxxxxxxxxxx, CO 8xxxx

Prepared by:

FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.
185 Bounty Hunter's Lane
Bailey, CO 80421



January 10, 2011

EXECUTIVE SUMMARY

- On December 30, 2010, state-of-the-art sampling was performed at xxxx xxxxxx Street, Aurora, CO (the subject property) for the determination of methamphetamine.
- The sample results indicated very high concentrations of methamphetamine. The samples indicated that concentrations in excess of as much as 380 times greater than the lawful limit are probable at the property.
- Based on the results of the samples, an illegal drug laboratory, as defined in Colorado Revised Statutes §25-18.5-101 (2.7) exists at the subject property.
- “Discovery” of an illegal drug laboratory, as that term is found in Colorado Revised Statutes §25-18.5-103 and Colorado Regulation 6 CCR 1014-3 (3) has now occurred at the subject property.
- By virtue of this letter and documentation, “Notification” as that term is used in CRS §25-18.5-103 (1)(a) is hereby made.
- According to CRS §25-18.5-104, entry into the property is now strictly prohibited. Prohibition on entry extends to all property owner(s), maintenance personnel, home inspectors, realtors, and any and all other personnel, except law enforcement personnel and personnel meeting the requirements of 6 CCR 1014-3 and Title 29 of the Code of Federal Regulations, Part 1910.120(e).
- Pursuant to CRS §25-18.5-103, the registered owner of a contaminated property exclusively has two options: 1) commission an authorized Industrial Hygienist to perform a “Preliminary Assessment” as described in 6 CCR1014-3 (4.0 *et seq*), or 2) Demolish the property. The jurisdiction for the subject property currently assigns no timeframe to complete the required activities.
- Several unauthorized consultants (including untrained Industrial Hygienists), have been performing consultation in illegal drugs labs in Colorado. Use of these consultants will result in a fatal flaw in the work. This, or any other fatal flaw in compliance with the State Regulations, will prevent the registered owner from receiving the liability immunity provided by CRS §25-18.5-103(2).
- According to Regulation 6 CCR 1014-3, any cleaning and/or remediation and/or decontamination is strictly prohibited, except pursuant to a completed Preliminary Assessment.



INTRODUCTION

On Thursday, December 30, 2010 Forensic Applications Consulting Technologies, Inc. (FACTs) was contracted to perform a standard cursory evaluation for the presence of methamphetamine [REDACTED] Colorado, (the subject property).

Consistent with the Colorado Real Estate methamphetamine disclosure and testing statute CRS §38-35.7-103(2)(a), FACTs collected two standard five-part composite samples for the quantitative determination of the presence of methamphetamine from ten different locations in the subject property. The sampling data quality objectives (DQOs) employed, as described in our December 28, 2010 bid cover letter, were to determine, within normal analytical confidences,¹ the possibility of methamphetamine presence at the subject property. Upon arrival to the property, FACTs' Industrial Hygienist decided to change the reportable limit to 0.25 µg/100 cm². Since the concentrations ultimately observed were so far in excess of the regulatory level, the change in reportable limits was entirely immaterial and inconsequential.

The samples were collected by Mr. Caoimhín P. Connell, who is an Industrial Hygienist, as that term is defined in CRS §24-30-1402. Mr. Connell was assisted in the field by a FACTs field technician.

Based on state of the art sampling and analysis techniques, we conclusively determined the presence of methamphetamine in the residential structure. During our assessment, we also made several observations which lead to the conclusion that the property had been used as a moderate to large illegal marijuana grow operation.

Based on current statutes and regulations, the property meets the definition of an “illegal drug laboratory” as described below. Analytical results from the subject property conclusively demonstrate noncompliance with Colorado State regulations and State statutes as described in the body of the report.

Pursuant to State Statute, a Preliminary Assessment must be performed at the property. Based on our observations, the Preliminary Assessment has no probability of resulting in a “Decision Statement” to release the property without the need for remediation.

According to current State of Colorado Regulations and Statutes, this report serves as “Discovery” as that term is found in Colorado Revised Statutes §25-18.5-103 and “Notification” as that term is used in CRS §25-18.5-103 (1)(a).

Based on this finding, after notification, entry into the property is strictly prohibited by CRS §25-18.5-104. The prohibition of entry extends to the property owner, the seller, the owner's representative(s), bank representatives, home inspectors, Realtors, and anyone

¹ Colorado Department Of Public Health And Environment, State Board Of Health, *Regulations Pertaining to the Cleanup of Methamphetamine Laboratories*, 6 CCR 1014-3, although not applicable at the time of our sampling, was used as a sampling reference.



else “...unless the person is trained or certified to handle contaminated property pursuant to board rules or federal law.”

Background Information

Structure

The subject property was a single family structure with an attic, and exterior attached garage. At the time of our visit, the structure was unoccupied.

PERTINENT REGULATORY STANDARDS

The State of Colorado currently has one methamphetamine regulation and three methamphetamine statutes that are germane to the subject property.

State Statutes

Environmental Statutes

Colorado has one of the country’s most comprehensive and scientifically based clandestine drug laboratory regulations. The Colorado regulations become applicable when the owner of a property has received “notification” from a peace officer that chemicals, equipment, or supplies indicative of a “drug laboratory” are located at the property, or when a “drug laboratory” is otherwise discovered,² and the owner of the property where the “illegal drug laboratory” is located has received notice.

In turn, “illegal drug laboratory” is defined in Colorado Revised Statutes §25-18.5-101(2.7) as the areas where controlled substances, have been manufactured, processed, cooked, disposed of, used, or stored and all proximate areas that are likely to be contaminated as a result of such manufacturing, processing, cooking, disposal, use, or storing.

Pursuant to State statute CRS §25-18.5-105(1), an illegal drug laboratory that has not met the cleanup standards set by the State Board of Health must be deemed a public health nuisance, and must either be demolished or remediated pursuant to a *legitimate* Preliminary Assessment.

Property Statutes

Pursuant to CRS §38-35.7-103 (1), a buyer of residential real property has the right to test the property for the purpose of determining whether the property has ever been used as a methamphetamine laboratory.

The fatal flaws of CRS §38-35.7-103, notwithstanding, pursuant to CRS §38-35.7-103 (2)(a):

If the buyer's test results indicate that the property has been used as a methamphetamine laboratory but has not been remediated to meet the standards

² CRS §25-18.5-103



established by rules of the state board of health..., the buyer shall promptly give written notice to the seller of the results of the test, and the buyer may terminate the contract.

Contrary to common misconception, by virtue of these findings, any second test performed pursuant to CRS §38-35.7-103(2)(b) that fails to confirm the presence of methamphetamine **cannot** be used to release the registered owner from the statutory requirements to perform the required Preliminary Assessment, since the discovery and notification have already occurred pursuant to CRS §25-18.5-103 (1)(a) and Colorado regulations 6 CCR 1014-3. Pursuant to State statutes, any additional testing by another Industrial Hygienist can only be used if the data support these initial findings; the data are not permitted to be used to refute, rebut or counter these findings, and cannot be used to provide the seller with regulatory relief.

According to Colorado revised statutes,³ the seller of a property shall disclose in writing to the buyer whether the seller knows that the property was previously used as a methamphetamine laboratory, unless a legitimate Decision Statement has been obtained.

Criminal Proceedings – Public Nuisance Statutes

Pursuant to State statute CRS §16-13-303(c)(1), every building or part of a building including the ground upon which it is situated and all fixtures and contents thereof, and every vehicle, and any real property shall be deemed a class 1 public nuisance when used for the unlawful storage or possession of any controlled substance, or any other drug the possession of which is an offense under the laws of Colorado. Based on CRS §16-13-303(c)(1), the presence of extant methamphetamine in the property is *prima facie* evidence of possession of the same.

Pursuant to State statute §16-13-308)(1)(a), if probable cause for the existence of a Class 1 Public Nuisance is shown to the court by means of a complaint supported by an affidavit, the court shall issue a temporary restraining order to abate and prevent the continuance or recurrence of the nuisance or to secure property subject to forfeiture. Such temporary restraining order shall direct the County Sheriff or a peace officer to seize and, where applicable, close the public nuisance and keep the same effectually closed against its use for any purpose until further order of the court.

An alternative declaration of Public Nuisance may be found in statute §16-13-307(4), wherein an action to abate a public nuisance may be brought by the district attorney, or the attorney general with the consent of the district attorney, in the name of the people of the State of Colorado or in the name of any officer, agency, county, or municipality whose duties or functions include or relate to the subject matter of the action.

State Regulations

Pursuant to Colorado regulations 6 CCR 1014-3,⁴ following discovery and notification, a comprehensive and detailed “Preliminary Assessment” must be commissioned by the

³ CRS 38-35.7-103(3)(a)

⁴ Titled: Colorado Department Of Public Health And Environment, State Board Of Health, *Regulations Pertaining to the Cleanup of Methamphetamine Laboratories*.



property owner and performed by an authorized (properly trained) Industrial Hygienist who must perform and complete several mandatory elements of the compliance process. The content and context of the “Preliminary Assessment” is explicitly delineated by regulation. Any remediation or cleaning of the property must be based on the Industrial Hygienist’s Preliminary Assessment, and cannot occur until such assessment has been conducted.

Since discovery and notification had not, to our knowledge, taken place at the time of our visit, FACTs was not performing a “Preliminary Assessment” as that term is defined in State regulation, and this work does not meet the definition of a “Preliminary Assessment” and cannot be used or otherwise substituted for a Preliminary Assessment.

Furthermore, no retesting of the property can challenge these data or provide regulatory relief unless the retesting is performed as part of the testing required to issue a Decision Statement (which must be based on a Preliminary Assessment).

At this point, FACTs did not determine jurisdiction (Governing Body) for the abatement of the public nuisance. However, since it is an Aurora address, the Governing Body is most likely either City and County of Denver or Tri-County Health Department. Nevertheless, FACTs will determine jurisdiction and forward a copy of this report to the Governing Body on Friday, January 14, 2011.

ASSESSMENT PROTOCOLS

Sampling Protocol

This Industrial Hygiene evaluation was performed pursuant to state of the art and standard industry practices and in compliance with Regulation 6CCR 1014-3 and Colorado’s Real Estate methamphetamine disclosure and testing statute as described by CRS §38-35.7-103(2)(a).

During our cursory evaluation, the hypothesis was made that the subject property was devoid of detectable concentrations of methamphetamine at a specified limit of detection and data would be collected to support the hypothesis. As such, the data quality objectives were not designed to quantify or characterize the *extent* or degree of contamination, but rather to support the hypothesis:

Methamphetamine is not present in the property above specified levels.

Our testing produced results that failed to support our initial hypothesis and we therefore accept the null hypothesis:

Methamphetamine is present in the property above specified levels.



Our DQOs were such that we selected a total sampling area that would result in a reportable quantity limit of 0.5 µg/100cm². That is, unless the concentration of the methamphetamine in the sample submittal exceeded 0.5 µg/100cm², the laboratory would report the concentration as “below detection limit.” The value of 0.5 µg/100cm² was selected since, according to the State of Colorado Regulations, the maximum permissible concentration of methamphetamine allowed as determined during compliance sampling is 0.5 µg/100cm² for a discreet sample.

Sample Collection

Using standard industrial hygiene methods, we collected two 5-part composite samples from the primary structure. The samples were submitted to Analytical Chemistry, Inc. for quantitative analysis using gas chromatography coupled with mass spectrometry. Analytical Chemistry Inc. is one of the laboratories listed in Colorado’s regulations as being proficient in methamphetamine analysis.

Wipe Samples

The wipe sample media was individually wrapped commercially available *Johnson & Johnson*TM gauze pads. Each gauze material was assigned a lot number for quality assurance and quality control (QA/QC) purposes and recorded on a log of results. Each pad was moistened with reagent grade methyl alcohol. Each batch of alcohol was assigned a lot number for QA/QC purposes and recorded on a log of results.

The sampling media were prepared off-site in small batches in a clean environment. The sample media were inserted into individually identified polyethylene centrifuge tubes with screw caps and assigned a unique sample identifier.

Field Blanks

Our data quality objectives did not include a field blank; none was required, and none were submitted. The history of the FACTs sampling media has demonstrated an alcohol contamination level below the analytical detection limit for the method (for n=24) and a gauze level below the analytical detection limit for the method (for n=20) with one flagged blank.⁵ Therefore, FACTs can say with confidence any methamphetamine reported by these data are a result of methamphetamine present at the property, and not as a result of contamination of the sampling materials.

Field Duplicates

For the purposes of the data quality objectives associated with this cursory evaluation, no duplicates were required, and none were collected.

⁵ Although reported by the laboratory as 0.06 µg, the laboratory also identified a potential reagent problem for the sample suite for which the blank represented (submitted on July 22, 2010), and determined that the GCMS spike was not methamphetamine.



Sample Results

The Table below presents the locations from which the composites were collected.

Sample ID	Sample Location	Status
VM123010-01A	Kitchen, top of fluorescent light	Noncompliant
VM123010-01B	Upstairs, return air vent	
VM123010-01C	Upstairs hall, smoke detector	
VM123010-01D	Upstairs bathroom, top of light fixture	
VM123010-01E	Upstairs central bedroom top of closet doors	
VM123010-02A	Basement, furnace interior	Noncompliant
VM123010-02B	Basement, utility room top of duct	
VM123010-02C	Basement bathroom, top of medicine chest	
VM123010-02D	Basement, SW bedroom, top of shelf	
VM123010-02E	Basement, landing top of smoke detector	

Table 1
Sample Locations

The actual methamphetamine *concentrations* found in the samples taken at the subject property, are not required to be reported here, and are not germane to the data quality objectives. Sample results reported during a cursory evaluation tend to result in the introduction of confusion. To avoid confusion, the results are not reported here, however, the sample results indicated that contaminated surfaces in the property were conclusively far in excess of the regulatory limits permitted by the State of Colorado.

The contamination in the property is such that if the sampling had been performed as part of compliance verification, the contamination had a probability range of not less than 99 times that permitted for a five parted composite and conclusively as much as 380 times that permitted for a five parted composite.

Sample concentration results are only germane exclusively at the end of a project. In an unofficial opinion issued by the State of Colorado Department of Public Health and the Environment,⁶ the state opined that even when the cursory concentrations are far below state mandated limits:

*"Performing a PA [Preliminary Assessment] and clearance sampling is the **only** way to meet the requirements of the Reg, get the liability shield, and provide protection for future Real Estate transactions."*

Contrary to popular misconception, there is no *de minimis* concentration during a Preliminary Assessment below which a property could be declared "not a meth lab" or

⁶ Email transmission from Craig Sanders to FACTs, January 31, 2008, quoting Coleen Bresnahan, CDPHE, regarding a property at 32548 Kinsey Lane Conifer, Colorado.



“not of regulatory concern” since virtually any concentration of meth present in a sample at the property would:

...lead a reasonable person, trained in aspects of methamphetamine laboratories, to conclude the presence of methamphetamine, its precursors as related to processing, or waste products.⁷

For this project, we selected a reportable quantity that was designed to avoid unnecessarily triggering the state regulations if only trace amounts of methamphetamine were identified. The reportable quantity was selected to ensure that only concentrations that were of a potential regulatory concern were identified.

Our data also indicate that there is no probability that the methamphetamine concentrations in the property are such that upon completion of the mandatory Preliminary Assessment, conditions at the property would permit the Industrial Hygienist to issue a Decision Statement directly from the mandatory Preliminary Assessment.

OBSERVATIONS

On the day of our assessment, December 30, 2010, FACTs was accompanied by two representatives of xxx Industries, xxx.

Immediately upon entry into the subject property, FACTs personnel immediately detected the strong odor of fresh marijuana (as opposed to burnt marijuana). While still standing in the entrance door to the property, FACTs also immediately identified the tell-tell remnants of wall coverings consistent with illegal marijuana grow operations. At that point, we shared our observations with representatives of xxx Industries xxx.

Upon entering the property fact observed whole leaf marijuana and large quantities of resin separation products in the kitchen.

Throughout the property, FACTs observed and photographed property damage that was mostly consistent with a marijuana grow operation but which could also be consistent with a methamphetamine production laboratory.

CONCLUSIONS

Based on our observations, the illegal drug operation had been very well established at the time the occupants left the structure in mid December, 2010.

Based on our observations, the illegal marijuana grow operation had been established for a lengthy period of time, probably on the order of at least a year and possibly longer. Objectively determining the time-frame of operation was outside of FACTs scope of work.

⁷ *Ibid.*



Based on our objective sample results the subject property contains methamphetamine.

Based on the presence of methamphetamine, the property meets the definition of an illegal drug lab and Class 1 public nuisance as defined in State statutes.

Pursuant to State statutes, the illegal drug lab has been “otherwise discovered.” Pursuant to statute, a Preliminary Assessment must be performed pursuant to regulation by an authorized Industrial Hygienist, and a “Decision Statement” obtained, or the property must be demolished.

If you have any questions regarding this report, please contact us at 303-903-7494.

Prepared by:



Caoimhín P. Connell
Forensic Industrial Hygienist



APPENDIX A LABORATORY REPORT





ANALYTICAL CHEMISTRY INC.

Established in 1979

4611 S. 134th Place, Ste 200
Tukwila WA 98168-3240

Website: www.acilabs.com

Phone: 206-622-8353

E-mail: info@acilabs.com

Lab Reference:	11102-03
Date Received:	January 5, 2011
Date Completed:	January 7, 2011

January 7, 2011

CAOIMHIN P CONNELL
FORENSIC APPLICATIONS INC
185 BOUNTY HUNTER'S LN
BAILEY CO 80421

CLIENT REF: [REDACTED]

SAMPLES: wipes/2

ANALYSIS: Methamphetamine by Gas Chromatography-Mass Spectrometry.

RESULTS: in total micrograms (ug)

Sample	Methamphetamine, ug	% Surrogate Recovery
VM123010-01	6.16	101
VM123010-02	1.59	105
QA/QC Method Blank	< 0.004	
QC 4.00 ug Standard	4.03	
QA 0.020 ug Matrix Spike	0.018	
QA 0.020 ug Matrix Spike Duplicate	0.018	
Method Detection Limit (MDL)	0.004	
Practical Quantitation Limit (PQL)	0.030	

'<': less than, not detected above the PQL

Robert M. Orheim
Director of Laboratories



ANALYTICAL CHEMISTRY INC.

CDL SAMPLING & CUSTODY FORM

4611 S 134th Pl, Ste 200 Tukwila WA 98168-3240
 Website: www.aclilabs.com

Phone: 206-622-8353
 FAX: 206-622-4623

Caolmhin P. Connell
 Forensic Applications, Inc.
 185 Bounty Hunters Lane, Bailey, CO 80421
 303-903-7494

SAMPLING DATE:	December 30, 2010	REPORT TO:	Caolmhin P. Connell	ANALYSIS REQUESTED
PROJECT Name/No:	[REDACTED]	COMPANY:	Forensic Applications, Inc.	1 Methamphetamine
eMail:	Fiosrach@aol.com	ADDRESS:	185 Bounty Hunters Lane, Bailey, CO 80421	2 Use entire contents
SAMPLER NAME:	Caolmhin P. Connell	PHONE:	303-903-7494	3 Normal Turn-around time
				4 RUSH
				5 Weigh and report in mg
				6 Not Submitted

LAB Number	Sample Number	SAMPLE MATRIX			ANALYSIS REQUESTS						SAMPLER COMMENTS	LAB COMMENTS	No of Containers	
		Wipe	Vacuum	Other	1	2	3	4	5	6				
	VM123010-01	X			X	X	X							1
	VM123010-02	X			X	X	X							1

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APPENDIX B CONSULTANT'S SOQ





**FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.
CONSULTANT STATEMENT OF QUALIFICATIONS**

(as required by State Board of Health Regulations 6 CCR 1014-3 Section 8.21)

FACTs project name:	xxxxxxx	Form # ML15
Date	December 28, 2010	
Reporting IH:	Caoimhín P. Connell, Forensic IH	

Caoimhín P. Connell, who has been involved in clandestine drug lab (including meth-lab) investigations since 2002, is a consulting forensic Industrial Hygienist meeting the Colorado Revised Statutes §24-30-1402 definition of an "Industrial Hygienist." He has been a practicing Industrial Hygienist in the State of Colorado since 1987; and is the contract Industrial Hygienist for the National Center for Atmospheric Research.

Mr. Connell is a recognized authority in methlab operations and is a Certified Meth-Lab Safety Instructor through the Colorado Regional Community Policing Institute (Colorado Department of Public Safety, Division of Criminal Justice). Mr. Connell has provided over 200 hours of methlab training for officers of over 25 Colorado Police agencies, 20 Sheriff's Offices, federal agents and probation and parole officers throughout Colorado judicial districts. He has provided meth-lab lectures to prestigious organizations such as the County Sheriff's of Colorado, the American Industrial Hygiene Association and the National Safety Council.

Mr. Connell is Colorado's only private consulting Industrial Hygienist certified by the Office of National Drug Control Policy High Intensity Drug Trafficking Area Clandestine Drug Lab Safety Program, and P.O.S.T. certified by the Colorado Department of Law; he is a member of the Colorado Drug Investigators Association, the American Industrial Hygiene Association (where he serves on the Clandestine Drug Lab Work Group), the American Conference of Governmental Industrial Hygienists and the Occupational Hygiene Society of Ireland. Mr. Connell is a Subject Matter Expert for the Department of Homeland Security, IAB Health, Medical, and Responder Safety SubGroup, and he conducted the May 2010 Clandestine Drug Lab Professional Development Course for the AIHA.

He has received over 128 hours of highly specialized law-enforcement sensitive training in meth-labs and clan-labs (including manufacturing and identification of booby-traps commonly found at meth-labs) through the Iowa National Guard/Midwest Counterdrug Training Center and the Florida National Guard/Multijurisdictional Counterdrug Task Force, St. Petersburg College as well as through the U.S. Bureau of Justice Assistance (US Dept. of Justice). Additionally, he received extensive training in the Colorado Revised Statutes, including Title 18, Article 18 "Uniform Controlled Substances Act of 1992."

Mr. Connell is a current law enforcement officer in the State of Colorado, who has conducted clandestine laboratory investigations and performed risk, contamination, hazard and exposure assessments from both the law enforcement (criminal) perspective, and from the civil perspective in residences, apartments, motor vehicles, and condominiums. Mr. Connell has conducted over 200 assessments in illegal drug labs, and collected over 1,900 samples during assessments (a detailed list of drug lab experience is available on the web at:

<http://forensic-applications.com/meth/DrugLabExperience2.pdf>

He has extensive experience performing assessments pursuant to the Colorado meth-lab regulation, 6 CCR 1014-3, (State Board Of Health *Regulations Pertaining to the Cleanup of Methamphetamine Laboratories*) and was an original team member on two of the legislative working-groups which wrote the regulations for the State of Colorado. Mr. Connell was the primary contributing author of Appendix A (*Sampling Methods And Procedures*) and Attachment to Appendix A (*Sampling Methods And Procedures Sampling Theory*) of the Colorado regulations. He has provided expert witness testimony in civil cases and testified before the Colorado Board of Health and Colorado Legislature Judicial Committee regarding methlab issues. Mr. Connell has provided services to private consumers, Indian Nations, state officials and Federal Government representatives with forensic services and arguments against fraudulent industrial hygienists and other unauthorized consultants performing invalid methlab assessments.

Mr. Connell, who is a committee member of the ASTM International Forensic Sciences Committee, was the sole sponsor of the draft ASTM E50 *Standard Practice for the Assessment of Contamination at Suspected Clandestine Drug Laboratories*, and he is a coauthor of a 2007 AIHA Publication on methlab assessment and remediation.

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