



FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

**Industrial Hygiene Assessment
of an Unoccupied Property
Resulting in the Discovery of an
Illegal Drug Laboratory
at
600 Forest Drive
Bailey, Colorado 80421**

**Prepared for:
Kyle and Tamara Mayne
26035 Amy Circle
Conifer, CO 80433**

Prepared by:

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



April 26, 2007

EXECUTIVE SUMMARY

On Tuesday, April 17, 2007, Forensic Applications Consulting Technologies, Inc. (FACTs) was contracted to perform a standard cursory a standard cursory evaluation for the presence of methamphetamine at 600 Forest Drive, Bailey , Colorado 80421 (the subject property).

Based on information and observations available to us, we collected standard composite samples for the determination of the presence of methamphetamine from nine locations in two separate structures located on the subject property. The sampling data quality objectives (DQOs) employed by FACTs were to determine, within normal analytical confidences,¹ the possibility of methamphetamine *presence* at the subject property. The samples were collected by Mr. Caoimhín P. Connell, Industrial Hygienist, as that term is defined in CRS §24-30-1402.

Based on state of the art sampling and analysis techniques, we conclusively determined the presence of methamphetamine in both dwelling structures at the subject property; and based on current statutes and regulations, the property meets the definition of an “illegal drug lab” as described below.

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

As such, this document also serves as the identification of probable contamination and, therefore, the conclusive presence of an “illegal drug lab” as defined by State statute (CRS §25-18.5-101). Based on this finding, after notification, entry into the property is prohibited by statute CRS §25-18.5-104.

Background Information

Structure

The subject property consists of two primary dwellings, a *circa* 1971 three story single family dwelling comprising of approximately 1850 square feet, and a “Mother-in-Law” apartment/garage area approximating 1,250 square feet. At the time of our visit, the structure was unoccupied, littered with various chattels, furniture, and rubbish.

¹ Colorado Department Of Public Health And Environment, State Board Of Health, Regulations Pertaining to the Cleanup of Methamphetamine Laboratories, 6 CCR 1014-3, used merely as a sampling reference.



The public records indicate that the registered owner of the property, until possession by the Mayne family, was:

Lasalle Bank NA As Trustee
Certificate Holders: Bear Stearns Assest Backed Sec (*sic*)
2780 Lake Vista Dr
Lewisville, Tx 750673884

PERTINENT REGULATORY STANDARDS

The State of Colorado currently has one methamphetamine regulation and three methamphetamine statutes that are germane to this particular 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 “drug laboratory” is located has received notice.

In turn, “drug laboratory” is defined in Colorado Revised Statutes §25-18.5-101 as the areas where controlled substances have been manufactured, *processed*, cooked, disposed of, *or stored* and all proximate areas that are likely to be contaminated as a result of such manufacturing, *processing*, cooking, disposing, or *storing*. The definitions of an illegal drug lab includes smoking methamphetamine, since smoking is a process, and its mere presence in the context of illegal possession constitutes *storage* and therefore, an “illegal drug lab” as defined by State statutes.

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.

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-

² CRS §25-18.5-103



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.

Property Statutes

Furthermore, 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. Pursuant to CRS §38-35.7-103(3)(c), a buyer has up to three years to perform such testing.

Pursuant to CRS §38-35.7-103 (3)(a), the seller shall disclose in writing to the buyer whether the seller knows that the property was previously used as a methamphetamine laboratory. Similarly, pursuant to CRS §38-35.7-103(3)(b) a seller who fails to disclose the presence of a methamphetamine lab is liable to the buyer for:

- (I) Costs relating to remediation of the property according to the standards established by rules of the state board of health promulgated pursuant to section 25-18.5-102, C.R.S.;
- (II) Costs relating to health-related injuries occurring after the sale to residents of the property caused by methamphetamine production on the property; and
- (III) Reasonable attorney fees for collection of costs from the seller.

State Regulations

Pursuant to Colorado regulations 6 CCR 1014-3,³ following discovery and notification, a comprehensive and detailed “Preliminary Assessment” must be commissioned by the property owner and performed by an authorized and properly trained Industrial Hygienist who must characterize extant contamination. The content and context of the “Preliminary Assessment” is explicitly delineated by regulation. Any remediation or

³ Titled: Colorado Department Of Public Health And Environment, State Board Of Health, *Regulations Pertaining to the Cleanup of Methamphetamine Laboratories*.



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 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.

Rather, our role was to perform a state-of-the-art, standard industry practice Industrial Hygiene contamination assessment for a property. The assessment was performed pursuant to the intent of methamphetamine testing as described by CRS §38-35.7-103(2)(a).

Mandatory Contamination Thresholds

The actual methamphetamine concentrations found in each sample taken at the subject property, for reasons described below, are not germane, are not within our stated data quality objectives, and therefore, are not required to be reported here.

A recurring myth in methlab related issues is that if an Industrial Hygienist performs a cursory investigation (such as that performed at the Forest Street property) or a "Preliminary Assessment" and finds methamphetamine, but the concentration is less than 0.5 micrograms per one hundred square centimeters ($\mu\text{g}/100\text{cm}^2$) of surface area, then the property is "OK," and not covered by the State regulations.

However, this argument is erroneous and no such provisions are found anywhere in State statutes or State regulation. If an Industrial Hygienist chooses non-mandatory sampling (such as performed at the subject property) during an industrial hygiene evaluation, and those samples result in ANY contamination, even below the value of $0.5 \mu\text{g}/100\text{cm}^2$, then the property must, by state regulation, be declared a methlab.⁴ This is due to the fact that cursory sampling does not meet the data quality objectives upon which the State clean-up level of " $0.5 \mu\text{g}/100\text{cm}^2$ " value is based.

In any event, contrary to erroneous public belief, the mere value of " $0.5 \mu\text{g}/100\text{cm}^2$ " is not the State of Colorado cleanup level, but rather that value is the basis upon which the final cleanup level is established and which is described in the mandatory Appendix A of the State regulations. The Colorado clearance level of " $0.5 \mu\text{g}/100\text{cm}^2$," frequently misquoted by members of the general public, applies exclusively as *prima facie* evidence of decontamination at the end of a project⁵ and is that attainment threshold occasionally needed to issue a "decision statement" (final clearance).

⁴ *Ibid.* Appendix A

⁵ Colorado Department Of Public Health And Environment, State Board Of Health, *Regulations Pertaining to the Cleanup of Methamphetamine Laboratories*, 6 CCR 1014-3.



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 “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.*⁶

Although our initial testing was conducted pursuant to CRS §38-35.7-103, based on our observations, our role and activities jointly and contemporaneously fell under CRS §25-18.5-103, and the drug laboratory was “otherwise” discovered.

ASSESSMENT PROTOCOLS

Visual Assessment

The sampling and assessment was performed by Mr. Caoimhín P. Connell, Forensic Industrial Hygienist. Mr. Connell’s Statement of Qualifications for methlab assessments is included with this discussion as Appendix A.

FACTs performed a cursory visual inspection of the subject property. During the inspection, we took several photographs which have been archived in our offices.

Sampling Protocol

During our industrial hygiene assessment, the hypothesis was made that the subject area was clean and data would be collected to find support for this hypothesis. As such, the data quality objectives were not designed to quantify or characterize the *extent* of contamination, but rather to support the statement: “Methamphetamine is not present in the property.”

Our testing did not support the hypothesis, and we therefore accept the null hypothesis; *viz.* the area conclusively contains methamphetamine.

Sample Collection

Using standard industrial hygiene methods, we collected two, 3-part composite samples from each of the two primary dwellings. The samples were maintained in our control at all times, and shipped under signed chain-of-custody to Analytical Chemistry, Inc. for quantitative analysis using gas chromatography coupled with mass spectrometry.

⁶ *Ibid.*



Wipe Samples

The wipe sample medium was individually wrapped commercially available *Johnson & Johnson*[™] 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 Safeway[™] brand USP 70% isopropyl 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.

Field Blanks

For QA/QC purposes, a field blank was randomly selected from the batch, randomly inserted in the sampling sequence and submitted along with the samples for methamphetamine analysis. To ensure the integrity of the blank, FACTs personnel were unaware, until the actual time of sampling, which specific sample would be submitted as a blank. To ensure the integrity of the blanks, laboratory personnel were not informed which specific sample was a blank. The history of the FACTs field blank media has demonstrated a media and solvent contamination level below the analytical detection limit for the method.

Field Duplicates

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

Experimental Field Spikes

The methamphetamine field sampling and analysis procedure is something that is still relatively new, and under constant development. FACTs is participating with two Federal occupational health and research agencies developing a better understanding of the sampling and analysis methods.

Included with this sample suit was a surreptitious wipe sample known as a “spike.” The wipe sample was treated in every way like all other samples, except the sample was not used to wipe a surface in the property. Instead, the sample was sent to a Federal research laboratory where a known amount of methamphetamine was “spiked” into the sampling media.

The spiked sample was returned to FACTs, and FACTs randomly inserted the spike into the sample sequence and submitted the spiked sample to the analyzing laboratory. The analyzing laboratory is never aware of the nature of the spike, the identity of the spike, the presence of the spike, or the amount of methamphetamine that had been spiked into the sample.

The purpose of the spike is to determine the adequacy of the method. The intrinsic value of the spike, as reported in this discussion, is given a low value due to the experimental



nature of the procedure. Therefore, the spike information is provided for academic purposes only, and is NOT considered part of the overall QA/QC program for this project. The spike recovery was 77.4%.

Cross Contamination

Prior to the collection of the samples, the Industrial Hygienist donned a fresh, clean Tyvek suit to ensure that there was no possibility for introduction of contaminants. Similarly, prior to each specific sample area, the Industrial Hygienist donned fresh surgical gloves, to protect against the possibility of cross contamination.

Each proposed sample area was delineated with a measured outline. Each wipe sample was collected by methodically wiping the entire surface of the selected area with moderate pressure; first in one direction and then in the opposite direction, folding the gauze to reveal fresh material as necessary. Each sample was assigned a unique sample number and returned to its centrifuge tube and capped with a screw-cap.

Sample Results

In the table below, we have presented the results of the sampling in the context of the DQOs.

Sample ID	Location of Wipe	Result
MM041707-01a	Main house Living room south wall	BDL
MM041707-01b	Main house Master bedroom	
MM041707-01c	Main house NW Bedroom	
MM041707-01	Main house BR/LR Composite	
MM041707-02a	Main house Kitchen	Positive
MM041707-02b	Main house Office	
MM041707-02c	Main house Downstairs Recreation Room	
MM041707-02	Main house Utility Room Composite	
MM041707-03a	Guest House Living Room	Positive
MM041707-03b	Guest House S Bedroom	
MM041707-03c	Guest House NE Bedroom	
MM041707-03	Upstairs Composite	
MM041707-04a	Guest House Main garage area	Positive
MM041707-04b	Guest House East garage room	
MM041707-04c	Guest House Top of active water heater	
MM041707-04	Downstairs composite	
MM041707-05	BX	BDL
MM041707-06	Spike	77.4%

**Table 1
Results of Methamphetamine Samples**

All but one of the submitted composites contained methamphetamine. Sample MM041707-01 was below the detection limit (BDL) for the analysis method. A copy of the laboratory report is included with this discussion as Appendix B.



CONCLUSIONS

Based on our objective sample results collected during our visit, the subject property contains methamphetamine.

Based on the presence of methamphetamine, and other methamphetamine production indicators, 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.”

This discussion serves as “notification” as that term is defined by State statute.

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.

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 can not be used to release the property owner from the need 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.

Based on our initial observations, the degree of methamphetamine residue in the property may be sufficiently low that the mandatory Preliminary Assessment may result in a Decision Statement (that is, the Preliminary Assessment may release the property for immediate occupancy without the need for remediation).

RECOMMENDATIONS

We recommend that the State statutes and State regulations be followed diligently.

Based on the above information, a “Preliminary Assessment” must be performed regardless of the findings of any subsequent testing, or the property must be demolished.

Pursuant to CRS §38-35.7-103(2)(a), the buyer must promptly give written notice to the seller of the results of the test, and the buyer may terminate the contract. We recommend that the registered owner (the seller) be notified in writing, by certified mail, of the results of the methamphetamine tests performed at the property.

Failure to take action in a manner consistent with state statutes may result in actions by the Park County Department of Environmental Health (the County of Jurisdiction).

A copy of this discovery and notification has been forwarded to the Governing Body for this jurisdiction on behalf of the client, Kyle Mayne.



APPENDIX A LABORATORY REPORT





ANALYTICAL CHEMISTRY INC. Established in 1979

4611 S. 134th Place, Ste 200
Tukwila WA 98168-3240
Phone: 206-622-8353
Fax: 206-622-4623

E-mail: aci@acilabs.com

Website: www.acilabs.com

Lab Reference:	07126-10
Date Received:	April 20, 2007
Date Completed:	April 24, 2007

April 24, 2007

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

CLIENT REF: Forest

SAMPLES: wipes/6

ANALYSIS: Methamphetamine by Gas Chromatography-Mass Spectrometry.

RESULTS: in total micrograms (ug)

Sample	Methamphetamine, ug	% Surrogate Recovery
MM041707 - 01	< 0.030	91
MM041707 - 02	2.26	83
MM041707 - 03	0.059	94
MM041707 - 04	0.253	91
MM041707 - 05	< 0.030	95
MM041707 - 06	7.74	96
QA/QC Method Blank	< 0.004	
QC 0.100 ug Standard	0.100	
QA 0.020 ug Matrix Spike	0.019	
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.acliabs.com

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

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 Please do not write in shaded areas.

SAMPLING DATE: 4/17, 2007	REPORT TO: Caoimhin P. Connell	ANALYSIS REQUESTED
PROJECT Name/No: Forest	COMPANY: Forensic Applications, Inc.	1 Methamphetamine
eMail: Fiosrach@aol.com	ADDRESS: 185 Bounty Hunters Lane, Bailey, CO 80421	2 Use entire contents
SAMPLER NAME: Caoimhin P. Connell	PHONE: 303-903-7494	3
		4
		5
		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				
	MM041707-01				X	X								1
	MM041707-02				X	X								1
	MM041707-03				X	X								1
	MM041707-04				X	X								1
	MM041707-05				X	X								1
	MM041707-06				X	X								1

CHAIN OF CUSTODY RECORD		Wipes Results in:		<input type="checkbox"/> µg/100cm ²		<input checked="" type="checkbox"/> Total µg		Total Number of Containers (verified by laboratory)		6	
PRINT NAME	Signature	COMPANY	DATE	TIME	Turnaround Time	Custody Seals:	Container:	Temperature:	Inspected By:	Lab File No.	No
Caoimhin P. Connell	<i>Caoimhin P. Connell</i>	FACTS, Inc.	4/18/07	12:00 noon	<input type="checkbox"/> 24 Hours (2X)	<input type="checkbox"/> Yes	Intact	Ambient	MIA SAZON	07126-10	Broken
MIA SAZON	<i>MS</i>	ACI	4/20/07	16:00	<input type="checkbox"/> 2 Days (1.75X)	<input type="checkbox"/> No	Intact	Ambient	MIA SAZON		Cooled
					<input type="checkbox"/> 3 Days (1.5X)	<input checked="" type="checkbox"/> Routine					

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Form 13 2007/03/08

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:	Forest - Mayne	Form # ML15
Date:	April 25, 2007	
Reporting IH:	Caoimhín P. Connell, Forensic IH	

Caoimhín P. Connell, is a private consulting forensic industrial hygienist meeting the definition of an "Industrial Hygienist" as that term is defined in the Colorado Revised Statutes §24-30-1402. Mr. Connell has been a practicing Industrial Hygienist in the State of Colorado since 1987 and has been involved in clandestine drug lab (including meth-lab) investigations since May of 2002.

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 methlab training for officers of over 25 Colorado Police agencies, 20 Sheriff's Offices, federal agents, and probation and parole officers from the 2nd, 7th and 9th 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 (Certification Number B-10670); he is a member of the Colorado Drug Investigators Association, and the American Industrial Hygiene Association.

He has received over 120 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 also a 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 50 assessments in illegal drug labs.

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 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, who is a committee member of the ASTM International Forensic Sciences Committee, is the sole author of the draft ASTM E50 *Standard Practice for the Assessment of Contamination at Suspected Clandestine Drug Laboratories*.