Preliminary Assessment of an Identified Illegal Drug Laboratory at:

3183 Vaughn St. Aurora, CO

Prepared for:

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EXECUTIVE SUMMARY

On Thursday, December 30, 2010, consistent with the Colorado Real Estate methamphetamine disclosure and testing statute (CRS §38-35.7-103(2)(a)), Forensic Applications Consulting Technologies, Inc. (FACTs) was contracted to perform a cursory methamphetamine contamination assessment at 3183 Vaughn Street, Aurora, CO (the subject property). The testing confirmed the presence of methamphetamine contamination at the property in excess of regulatory concentrations. The testing indicated widespread contamination of methamphetamine throughout the residence. FACTs also observed widespread presence of a marijuana grow at the residence.

On January 10, 2010, FACTs issued a written report of the cursory testing which met the definition of "discovery" and "notification" and which triggered Colorado State Board of Health Regulation 6 CCR 1014-3.

FACTs was subsequently contracted by the Registered Owner of the subject property to perform a standard State-mandated Preliminary Assessment (PA). From January 13, 2011 to January 18, 2011, personnel from FACTs performed the PA pursuant to Colorado Regulation 6 CCR 1014-43, Part 4.

Samples taken during the testing conclusively demonstrated the presence of widespread methamphetamine contamination throughout the structure, including the furnace system, garage and the attic, but excluding the small exterior shed.

Subjectively, the Registered Owners informed FACTs that the tenants responsible for the contamination never had access to the camper parked on the property, and that the camper was always pad-locked. As such, FACTs concluded that the camper, too, was excluded from the need for remediation.

Pursuant to Colorado Revised Statutes, CRS §16-13-103, the residence, and all remaining personal items therein, meet the definition of an "illegal drug laboratory." Based on the totality of the circumstances, FACTs makes the following observations:

- The property exhibits overt noncompliance with Colorado's methamphetamine cleanup standards.
- "Discovery" and "Notification" existed by virtue of the FACTs December 30, 2010 samples as described in our January 10, 2010 report.
- A noncompliant illegal drug lab, as that term is defined in CRS §25-18.5-101, existed at the subject property from at least December 30, 2010 forward, and continues to exist at the time of this Preliminary Assessment.

- A Class 1 Public Nuisance, as defined in CRS §16-13-303(1) existed at the subject property from at least December 30, 2010 forward, and continues to exist at the time of this report.
- The entire interior structure, including the attic and the garage, but excluding the shed and camper, must be decontaminated in a manner consistent with State regulations.
- Following the decontamination activities, a qualified Industrial Hygienist must perform the post-decontamination process and issue a Decision Statement before reentry or occupancy of the subject property may occur.
- The PA and sampling was performed by Mr. Caoimhín P. Connell, Forensic Industrial Hygienist with FACTs. Mr. Connell was assisted by Ms. Christine Carty, Field Technician. ¹

REGULATORY REQUIREMENTS

Federal Requirements

All work associated with this PA was performed in a manner consistent with regulations promulgated by the Federal Occupational Safety and Health Administration (OSHA).

State Requirements

Preliminary Assessment

According to Colorado State Regulation 6-CCR 1014-3, following the discovery of an illegal drug lab, as that term is defined in CRS §25-18.5-101, and following "notification," the property must either be demolished or a "Preliminary Assessment" must be conducted at that property to characterize extant contamination (if any), and to direct appropriate decontamination procedures (if any). Pursuant to these regulations, information obtained in the PA, and those findings, enter the public domain and are not subject to confidentiality.²

The PA must be conducted according to specified requirements³ by an authorized Industrial Hygienist as that term is defined in CRS §24-30-1402. This document, and all associated appendices and photographs, is the PA pursuant to those regulations. Included with this discussion is a read-only digital disc. The disc contains mandatory information and photographs required by State regulation for a PA. This PA is not complete without the digital disc and all associated support documents.



¹ Ms. Carty received a training certificate in Clandestine Drug Lab Safety through the Colorado Regional Community Policing Institute (CRCPI) sponsored by the US Dept. of Justice High Intensity Drug Trafficking Area fund.

² Section 8.26 of 6 CCR 1014-3

³ Section 4 of 6 CCR 1014-3

Pursuant to CRS §25-18.5-105, the subject property is deemed a "public health nuisance." Pursuant to CRS §16-13-303, the subject property and all of its contents is deemed a Class 1 Public Nuisance. As such, the subject property must be remediated according to State Board of Health regulations 6-CCR-1014-3 or demolished (CRS §25-18.5-103).

Preliminary Hypothesis

During the PA, the initial hypothesis is made that the subject area is clean, and data are collected to find support for this hypothesis. Any reliable data that fails to support the hypothesis, including police records, visual clues of illegal production, storage, or use, or documentation of drug paraphernalia being present, is considered conclusive, and requires the Industrial Hygienist to accept the null hypothesis and declare the area noncompliant.⁴ The strength of evidence needed to reject the hypothesis is low, and is only that which would lead a reasonable person, trained in aspects of meth laboratories, to conclude the *presence* of methamphetamine, and/or its precursors or waste products as related to processing.

Contrary to common belief, sampling is **not** required during a PA; however, if sampling is performed, it is conducted in the areas with the highest probability of containing the highest possible concentrations of contaminants. According to the State regulations:⁵

Identification and documentation of areas of contamination. This identification may be based on visual observation, law enforcement reports, proximity to chemical storage areas, waste disposal areas, or cooking areas, or based on professional judgment of the consultant; or the consultant may determine that assessment sampling is necessary to verify the presence or absence of contamination.

Initial Statement on Hypothesis Testing

Regarding this subject property, objective sampling performed by FACTs on December 30, 2010, confirmed overt methamphetamine contamination. In the totality of circumstances, any one of the samples would have challenged the Primary Hypothesis, and require FACTs to accept the null hypothesis and declare the primary residence and all contents therein as non-compliant.

Pursuant to testing consistent with Section 7, 6 CCR 1014-3, FACTs further challenged the compliance status of the furnace, the garage, the attic and the exterior shed. Through that sampling, we determined that although methamphetamine was present in shed, the concentrations did not rise to the standard of contaminant, and the concentrations were below the appropriate regulatory thresholds. Therefore, the shed has been excluded from the need for any corrective actions.

⁵ Section 4.6 of 6 CCR 1014-3



⁴ This language and emphasis is verbatim from Appendix A (mandatory) of 6 CCR 1014-3

The samples designed to challenge the compliance status of the furnace system, the attic and the garage, however, confirmed the presence of overt and widespread contamination in excess of the regulatory thresholds, and these areas are included in the remediation process.

Elements of the Preliminary Assessment

Specific mandatory information must be presented as part of the PA. This discussion, in its totality, contains the mandatory information for a PA as follows:

Mandatory Final Documents 6-CCR 1014-3	DOCUMENTATION	Included
§4.1	Property description field form	Ca/
§§4.4, 4.5	Description of manufacturing methods and chemicals	Carl
§4.2	Law Enforcement documentation review discussion	Carl
§4.7	Description and Drawing of Storage area(s)	Carl
§4.8	Description and Drawing of Waste area(s)	Carl
§4.9	Description and Drawing of Cook area(s)	Carl
§§4.3, 4.6, 4.10	Field Observations field form	Carl
334.5, 4.0, 4.10	FACTs Functional space inventory field form	Cal
§4.11	Plumbing inspection field form	Can
34.11	FACTs ISDS field form	Cand
§4.12	Contamination migration field form or description	Can
§4.13	Identification of common ventilation systems	Carl
§8.11	Description of the sampling procedures and QA/QC	Carl
§8.12	Analytical Description and Laboratory QA/QC	Can
§8.13	Location and results of initial sampling with drawings	Carl
§8.14	FACTs health and safety procedures in accordance with OSHA	Cand
§8.15 - §8.19	These sections are not applicable to a Preliminary Assessment	ent
§8.20	FACTs Pre-remediation photographs and log	Carl
_	FACTs Post-remediation photographs and log	NA
§8.21	FACTs SOQ	Carl
§8.22	Certification of procedures, results, and variations	Can
§8.23	Mandatory Certification Language	Carl
§8.24	Signature Sheet	Carl
	Analytical Laboratory Reports	Cal
NA	FACTs final closeout inventory document	Carl
	FACTs Field Sampling Forms	Can

Table 1 Inventory of Mandatory Elements and Documentation

Subject Structure

Based on information from the Adams County Assessor's Office, the primary structure consisted of 2,715 square feet of residential floor space built *circa* 1958. For the purposes of regulatory compliance, traditionally non-taxable spaces (such as the enclosed foyer and the attic) must be included in the assessment. Therefore, for the purposes of this PA, the approximate total square feet of potentially impacted floor space used in the PA is 3,891 square feet. Sampling requirements are based on this value.

A general aerial layout of the residential setting is depicted in the aerial photograph below. The subject property is outlined in red.



Figure 1 General Site Layout⁶

A partial plat map for the property, with Parcel Number is given below with the subject property in red.



Figure 2 Partial Plat Map

 $^{^6}$ Courtesy of USDA Farm Service Agency as accessed through Google $^{\rm TM}$



Review of Law Enforcement Documentation

As part of the PA, FACTs is required by regulation⁷ to review available law enforcement documents pertinent to a subject property. During this project, FACTs contacted three regulatory/law enforcement agencies for documentation:

- 1. Adams County Sheriff's Office
- 2. Aurora Police Department
- 3. Tri-County Health Department

Each agency exhibited the highest standard of professionalism and courtesy, and participated openly with our requests for information. ACSO informed us that Aurora PD did not participate in the North Metro Drug Task Force. Aurora PD and Tri-County Health each informed us they did not have any pertinent information within the context of our assessment regarding this property address.

Based on the best available information, there are no law enforcement documents pertaining to controlled substances for this subject property.

Governing Body

Pursuant to statute and regulations, the documentation in this report must be submitted to the "Governing Body" to avail of the statutory liability immunity. The *de facto* "Governing Body" as defined in CRS 25-18.5-101 for this property is:

Tri-County Health Department 4201 E. 72nd Ave. Commerce City, CO 80022

Visual Inspection of the Property

As part of the Preliminary Assessment, on January 18, 2011, Mr. Caoimhín P. Connell, Forensic Industrial Hygienist with FACTs, performed a visual inspection of the subject property. During the assessment, Mr. Connell was assisted by Field Technician, Christine Carty. The property was in an "unoccupied" condition, and was mostly devoid of chattels but did contain some personal belongings and rubbish and debris.

FUNCTIONAL SPACE SUMMARY

During a Preliminary Assessment, the Industrial Hygienist is required by regulation to divide the study area into "functional spaces," and evaluate the potential for contamination in each area. The idea is to segment a property into specific areas which may present different potentials for contamination, based on the anticipated use or function conducted in that area. Thus, functions of bedrooms and bathrooms may be different, kitchens and living rooms, may be different, etc. Pursuant to regulations, a

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⁷ 6 CCR 1014-3 (Section 4.2)

building is divided into such areas based solely on subjective professional judgment with foundational guidance in Federal Regulation.⁸

A general overview of each space is provided in the following discussion. Indicators are detailed in FACTs form ML5, included in the appendix of this report. For evaluation purposes, the following Functional Spaces have been identified and are addressed below:

Structure	Functional Space Number	Describe the functional space
1	1	Living room and coat closet
1	2	Dining room, kitchen, back hall and closets X2
1	3	Ground floor bathroom
1	4	Ground floor northwest bedroom
1	5	Ground floor southwest bedroom
1	6	Ground floor southeast bedroom
1	7	Stairwell
1	8	Basement recreation room
1	9	Basement southwest bedroom and closet
1	10	Basement northeast bedroom and closet
1	11	Basement laundry room hall and furnace room
1	12	Basement bathroom
1	13	Furnace system
1	14	Garage
1	15	Garage foyer
1	16	Attic
1	17	Exterior shed
2	18	Camper

Table 2 Functional Space Inventory

Functional Space 1: Living Room Complex

The living room complex is the large central living area in the house that includes the entry way coat closet.

There were a number of visual indicators in this room including a repaired hole in the ceiling that housed a central shaft leading to a marijuana odor filtration system in the attic. This room contained several other visual indicators including aluminum tape at the entrance door (on the floor) and staples around the windows. This room, characteristically for the entire remainder of the house, had a strong odor of raw marijuana.

Functional Space 2: Dining room complex

This functional space includes the three contiguous areas of the dining room, the kitchen and the back hall way. There was a considerable amount of marijuana debris remaining

⁸ Asbestos Containing Materials in Schools; Final Rule and Notice, Title 40 CFR Part 763, Fed. Reg. Vol. 52, No. 210, Fri. Oct. 30, 1987



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in this space. This space also contained other visual indicators including window blinding anchors.

This space was included in the cursory sampling performed on December 30, 2010. The results of that composite sample indicated an overall contamination of 38 micrograms of methamphetamine per 100 square centimeters (38 μ g/100 cm2).

Functional Space 3: Ground Floor Bathroom

This space is defined as the term is commonly known and used. This space contained over the counter drugs and signs of blood.

This space was included in the cursory sampling performed on December 30, 2010. The results of that composite sample indicated an overall methamphetamine contamination level of $38 \mu g/100 \text{ cm}2$.

Functional Space 4: Ground Floor Northwest Bedroom

This functional space includes items and fixtures as that term is commonly understood. This space contained several visual indicators consistent with illegal marijuana grow operations and several signs consistent with other controlled substance activities.

The room exhibited signs of violence, forced entry damage to the door, holes cut into closet walls, and other structural and cosmetic damage.

Functional Space 5: Ground Floor Southwest Bedroom

This is the southeast bedroom and bedroom closet, and is delineated as the term "bedroom" is commonly used. This room contains several visual indicators consistent with illegal marijuana grow operations and several signs consistent with other controlled substance activities. The room contains cosmetic damage, and some minor structural damage.

Functional Space 6: Ground Floor Southeast Bedroom

This is the central south bedroom and bedroom closet, and is delineated as the term "bedroom" is commonly used.

The room, similar to the other bedrooms, has unusual cosmetic damage consistent with "artistic expressions" or consistent with painting performed in an attempt to cover-up damage to the walls or surface features.

This space was included in the cursory sampling performed on December 30, 2010. The results of that composite sample indicated an overall methamphetamine contamination level of $38 \mu g/100 \text{ cm}2$.

Functional Space 7: Stairwell

This space is delineated as the term is commonly known and includes the landing at the bottom of the stairs. The upstairs door leading to the stairwell is unusual to the extent it has a locking mechanism with no door handle.

The base of the stairs exhibits wall anchors consistent with the wall sheeting used in illegal marijuana grow operations.

The stairwell contains cosmetic damage.

This space was included in the cursory sampling performed on December 30, 2010. The results of that composite sample indicated an overall methamphetamine contamination level of $10 \mu g/100 \text{ cm}2$.

Functional Space 8: Basement Recreation Room

This space is the large general use room that occupies approximately one half of the south side of the basement. The room contained some cosmetic damage, but no other overt indicators (except the persistent odor of marijuana).

Functional Space 9: Basement Southwest Bedroom and Closet

This is the large bedroom and bedroom closet located in the southwest quadrant of the basement and is delineated as the term "bedroom" is commonly used. The room contained some cosmetic damage, but no other overt indicators except the persistent odor of marijuana.

This space was included in the cursory sampling performed on December 30, 2010. The results of that composite sample indicated an overall methamphetamine contamination level of $10 \mu g/100 \text{ cm}2$.

Functional Space 10: Basement Northeast Bedroom and Closet

This is the bedroom and bedroom closet located at the base of the stairs and is delineated as the term "bedroom" is commonly used. The room had a strong odor of raw marijuana, and considerable cosmetic damage consistent with illegal marijuana grow operations. This room had evidence of wall coverings and window blinds consistent with various types of clandestine drug operations.

Functional Space 11: Laundry Room, Hall and Furnace Room

This space is the large general use room complex that occupies approximately one half of the north side of the basement. The room contained raw marijuana leaves, considerable cosmetic damage, evidence of wall coverings and window blinds, and other unusual indicators consistent with various types of clandestine drug operations. The exterior duct work contained unusual duct tape consistent with partitioning walls favored by marijuana growers.

Functional Space 12: Basement Bathroom

The basement bathroom contained several indicators consistent with illegal drug operations including signs of violence, modified plumbing, squalor and other indicators.

This space was included in the cursory sampling performed on December 30, 2010. The results of that composite sample indicated an overall methamphetamine contamination level of $10 \mu g/100 \text{ cm}2$.

Functional Space 13: Furnace

The Furnace System in the structure is a standard residential forced air system. The actual mechanical unit is located within Functional Space 11 but with a ducted distribution system throughout the entire residential structure.

Although arguably not a functional space *per se*, FACTs collected a sample from the furnace interior to determine if the furnace system could be excluded from the decontamination process.

The sample collected from the duct interior indicated that methamphetamine contamination in that part of the system contained noncompliant concentrations of methamphetamine (approximately 1.3 μ g/100 cm2); as such the furnace system cannot be excluded from the decontamination process.

It is well established knowledge in the Industrial Hygiene and medical professions that the use of methamphetamine in a home results in elevated exposures to the occupants via airborne migration. When methamphetamine is smoked, between 80% and half of the substance is released from the user's pipe. Of that material which is inhaled, between 33% and 10% of the nominal dose is not absorbed into the body, but rather exhaled back into the ambient air.

¹² Cook CE, Jeffcoat AR, Hill JM, Pugh DE, et al *Pharmacokinetics of methamphetamine self-administered to human subjects by smoking S-(+)-methamphetamine hydrochloride* Drug Metabolism and Disposition, Vol 21, No. 4, pp. 717-723, 07/01/1993



⁹ Cook CE, *Pyrolytic Characteristics, Pharmacokinetics, and Bioavailability of Smoked Heroin, Cocaine, Phencyclidine, and Methamphetamine* (From: Methamphetamine Abuse: Epidemiologic Issues and Implications Research Monograph 115, 1991, U.S. Department Of Health And Human Services Public Health Service Alcohol, Drug Abuse, and Mental Health Administration National Institute on Drug Abuse

¹⁰ Cook CE, Jeffcoat AR, Hill JM, et al. *Pharmacokenetics of Methamphetamine Self-Administered to Human Subjects by Smoking S-(+)-Methamphetamine Hydrochloride*. Drug Metabolism and Deposition Vol. 21 No 4, 1993 as referenced by Martyny JW, Arbuckle SL, McCammon CS, Erb N, Methamphetamine Contamination on Environmental Surfaces Caused by Simulated Smoking of Methamphetamine (The publication of this study is currently pending. Copies of the study are available from the Colorado Alliance for Drug Endangered Children.)

Harris DS, Boxenbaum H, Everhart ET, Sequeira G, et al, *The bioavailability of intranasal and smoked methamphetamine*, Pharmacokinetics and Drug Disposition, 2003;74:475-486.)

Recent work conducted by Industrial Hygienists at the National Jewish Hospital¹³ in Denver, CO indicate that a single use of methamphetamine, by smoking, could result in an average residential area ambient airborne concentration of methamphetamine ranging from 35 micrograms per cubic meter ($\mu g/m3$) to over 130 $\mu g/m3$. These authors found that smoking methamphetamine just once in the residence can result in surfaces being contaminated with methamphetamine. The authors concluded:

"If methamphetamine has been smoked in a residence, it is likely that children present in that structure will be exposed to airborne methamphetamine during the "smoke" and to surface methamphetamine after the 'smoke."

Since it is the purpose of the forced air ventilation system to move air throughout the structure, and the furnace (as evidenced by the sample collected from the duct interior) conclusively contained elevated concentrations of methamphetamine, we conclude the furnace was an effective mechanism of dissemination of methamphetamine and may be a continued source of contamination until appropriately addressed.

The results of the furnace sample alone would lead a reasonable person, trained in aspects of methamphetamine laboratories, to conclude the *presence* of widespread elevated methamphetamine contamination throughout the entire occupied space, <u>all other sample results notwithstanding</u>, and in the absence of any sample result for any specific location. Therefore, it is for this reason that FACTs confidently concludes that, based on just this sample alone, an high probability of elevated concentrations of methamphetamine exists throughout the residence including all remaining chattels, carpets and all areas that have not been confirmed as contaminated by sampling. Having said this, the remaining samples have nevertheless objectively confirmed the existence of widespread contamination.

Functional Space 14: Garage

The attached single-car garage is situated to the north of the residence, and is delineated as the term "garage" is commonly used. Access to the attic is from the garage. The garage is accessed from the house through the kitchen.

The garage contained debris and the remains of illegal marijuana grow structures (in particular, partitioning walls).

A single discreet sample was collected from the top of the garage door opening mechanism. The sample indicated noncompliant concentrations of methamphetamine (1

¹⁴ Martyny JW, Arbuckle SL, McCammon CS, Erb N, *Methamphetamine Contamination on Environmental Surfaces Caused by Simulated Smoking of Methamphetamine* (The publication of this study is currently pending. Copies of the study are available from the Colorado Alliance for Drug Endangered Children.)



¹³ Martyny JW, Arbuckle SL, McCammon CS, Erb N, *Methamphetamine Contamination on Environmental Surfaces Caused by Simulated Smoking of Methamphetamine* (The publication of this study is currently pending. Copies of the study are available from the Colorado Alliance for Drug Endangered Children.)

 μ g/100cm2), and, therefore, the garage and all contents therein are considered contaminated and must be included in the decontamination process.

Functional Space 15: Garage Foyer

The garage foyer appears to be an after-market enclosure accessed from the garage and from the sliding glass door of the dining room.

We did not observe any visual indicators in this area.

Functional Space 16: Attic

The attic essentially has the same plan as the ground floor. Upon entry into the attic we observed a makeshift marijuana filtering device manufactured from a seat cushion hidden in the attic. (See Photograph 1)



Photograph 1
Marijuana Filtration Device

The filtration device had originally been inserted through the hole in the living room ceiling (the circular damaged area in the central portion of the photograph).

The attic is an area that may be reasonably occupied for storage and entry, and therefore, a single discreet sample was collected from the top of the metal duct by the filtration device. The sample indicated noncompliant concentrations of methamphetamine (1 $\mu g/100 cm2$), and therefore the attic and all contents therein are considered contaminated and must be included in the decontamination process.

Functional Space 17: Exterior Shed

The exterior shed is built up along the south side of the structure and appears to be a small potting shed with miscellaneous gardening items. The shed also contained debris and the remains of illegal marijuana grow structures (in particular, partitioning walls).

Functional Space 18: Camper

The camper in the front of the house was secured with a chain and pad-lock. The registered owners of the house informed FACTs that the occupants of the house never had access to the camper. In the totality of the circumstances, FACTs has excluded the camper from the need for remediation. The Governing Body is hereby notified of our decision, and FACTs will assume that unless the Governing Body directs us otherwise, the Governing Body does not object to our decision to exclude the camper from the decontamination process.

EXTERIOR GROUNDS

Although not truly a functional space *per se*, the exterior grounds were assessed independently. Although we did observe some evidence of stressed vegetation along the fence line to the west and at the dog run to the south the areas of stressed vegetation were consistent with that created by a dog, and were not consistent with the patterns associated with illegal dumping or contamination migration.

On the day of our visit, approximately 25% of the outdoor yard was covered with snow. The vegetation was in a winter state, which may hinder our observations.

SEWERAGE SYSTEM

The sewer system is "city sewer." Although we presume that some waste materials were introduced into the sewer system, we did not observe any indicators that the integrity of the sewer system was compromised.

SAMPLE COLLECTION

Wipe Samples

The samples collected during the Preliminary Assessment comprised of "discreet" samples; "composite" samples were collected during the cursory evaluation on December 30, 2010.

Discreet samples are a single wipe, collected from a single area, and submitted for analysis as a unique location.

Composite samples were collected during the cursory evaluation and are single wipes, which are included with other single wipes placed together and analyzed as a single sample.

Each sample location was identified by the Industrial Hygienist based on authoritative bias sampling theory. In this theory, consistent with State regulation, samples are purposely collected from those areas which have the highest probability of containing the highest concentrations of methamphetamine.

Methamphetamine

Wipe samples were collected in a manner consistent with State regulations. The wipe sample medium was individually wrapped commercially available Johnson and JohnsonTM brand 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. Each proposed sample area was delineated with a measured outline. The ruler used to measure the surface area was decontaminated with a single-use disposable alcohol wipe between samples where the ruler contacted the surface.

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 returned to its centrifuge tube and capped with a screw-cap. The wipe samples were submitted for analysis to Analytical Chemistry Inc. in Tukwila, Washington.

QA/QC Precautions

The sampling media were prepared in small batches in a clean environment (FACTs Corporate Offices). The sample media were inserted into individually identified disposable plastic centrifuge tubes with caps.

Field Blanks

For QA/QC purposes, and in accordance with State requirements, one field blank was submitted for every ten wipe samples. The field blank was randomly selected from the sampling sequence and included with the samples. 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. Similarly, to ensure the integrity of the blank, laboratory personnel were unaware of the presence of a blank in the sample suite.

Cross Contamination

Prior to the collection of each specific sample area, the Industrial Hygienist donned fresh surgical gloves, to protect against the possibility of cross contamination.

Prior to entry into the property, each member of FACTs donned a disposable Tyvek suit.

The ladder used during our assessment had been decontaminated at a car wash prior to being brought on site.



Collection Rationale

Primary Objective

It is a common misconception that the Industrial Hygienist is required to collect samples during a PA. However, no such requirement exists in Colorado. Rather, regarding samples, the regulations state:

Pre-decontamination sampling

In pre-decontamination sampling, the question that is being asked is "Is there evidence of the presence of methamphetamine production in this area?" The assumption (hypothesis) is that the area is clean i.e. "compliant," and data will be collected to find support for the hypothesis. Data (such as samples) are collected to "prove" the area is compliant. Sampling, if it is performed, is conducted in the areas potentially containing the highest possible concentrations of contaminants. <u>Any</u> data that disproves the hypothesis, including police records, visual clues of production, storage, or use or documentation of drug paraphernalia being present, is considered conclusive, and leads the consultant to accept the null hypothesis and declare the area non-compliant. The strength of evidence needed to reject the hypothesis is low, and is only that which 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.

Similarly, there is a misconception that if samples are collected, and the laboratory results are below the value often misinterpreted as the State's regulatory threshold value (0.5 µg/100 cm2), the samples necessarily indicate that the area is not contaminated and no action is required. However, the regulatory threshold values are exclusively to be used as *prima fascia* evidence during final verification activities in the absence of all other information. Except, during a final verification or a properly designed Preliminary Assessment, there is no *de minimis* concentration of methamphetamine below which a statement of compliance can be made in the absence of final verification sampling. Although State regulation does <u>not</u> require samples to be collected during a Preliminary Assessment, as part of this Preliminary Assessment, samples were collected.

For this project, FACTs had sufficient information from the cursory sampling results to conclude that the contamination in the subject property was widespread, and, based on the totality of the circumstances, in accordance with 6 CCR 1014-3, we concluded that those areas not sampled were similarly contaminated.

However, to objectively test the *a priori* assumption for the garage, furnace, shed and attic, (which could significantly increase remediation costs), FACTs selected a sample from each of those functional spaces which would best represent the worst case scenario in those spaces, as required by regulation. These samples, along with a blank, were submitted for analysis. Based on these samples, we were able to exclude only the exterior shed from the scheduled remediation.

Sample Results

Methamphetamine

The results of the methamphetamine samples are summarized in the table below. The shaded samples are those that were collected during the cursory evaluation.

Date	Sample	Location	Area	Result	Criterion	Status
12/30/10	VM123010-01A	Kitchen, top of fluorescent light				
12/30/10	VM123010-01B	US, return air vent				
12/30/10	VM123010-01C	US hall, smoke detector	16	38.2	0.10	FAIL
12/30/10	VM123010-01D	US bathroom, top of light fixture				
12/30/10	VM123010-01E	US central bedroom, closet doors				
12/30/10	VM123010-02A	Bsmnt, furnace interior				
12/30/10	VM123010-02B	Bsmnt, utility room top of duct				
12/30/10	VM123010-02C	Bsmnt bathroom, medicine chest 16 9.9		0.10	FAIL	
12/30/10	VM123010-02D	Bsmnt, SW bedroom, top of shelf	elf			
12/30/10	VM123010-02E	Bsmnt, landing smoke detector				
01/18/11	VM011811-01	Garage	672	1.1	0.50	FAIL
01/18/11	VM011811-02	Attic- top of marijuana vent	arijuana vent 540 1.3		0.50	FAIL
01/18/11	VM011811-03	Field Blank 500 <		< 0.03	0.50	PASS
01/18/11	VM011811-04	Furnace interior	nterior 539 1.3		0.50	FAIL
01/18/11	VM011811-05	Outside shed electrical wire	500	0.4	0.50	PASS

Area is expressed in square centimeters

Result and Criterion are expressed as µg/100cm2 (Field blanks are reported as absolute mass in µg)

Table 3 Results of Methamphetamine Wipe Samples

Wipe Sample Results

The samples confirm widespread noncompliant concentrations of methamphetamine throughout the structure to within a very strong degree of confidence.

Quality Assurance/Quality Control

The following section is required by regulation and is not intended to be understood by the casual reader. All abbreviations are standard laboratory use, and the data pertains to the attic sample only (since the attic sample is the only sample that can be used for compliance purposes).

PA Data Set

MDL was 0.004 μ g; LOQ was 0.03 μ g; MBX <MDL; LCS 0.1 μ g (RPD 5%, recovery =105%); Matrix spike 0.020 μ g (RPD 5%; recovery 95%); Matrix spike Dup 0.020 μ g; (RPD 10%; recovery 11%); Surrogate recovery: High 98% (Samples 2 and 5), Low 95% (Samples 1 and 3); FACTs reagents: MeOH lot #A1ØØ1 <MDL for n=27, >MDL for n=0; Gauze lot G1ØØ6 <MDL for n=5, >MDL for n=0. The QA/QC indicate a slight net negative bias and the actual surface methamphetamine concentrations reported for the data asset may be slightly greater than reported here. However, since only one datum

The symbol "<" indicates that methamphetamine was not detected at the detection limit expressed.

(the shed) is slightly below the decision threshold, the compliance status of the remainder of the house is not altered if the samples are expressed at the UCL. If the recoveries are used to calculate the CV_T and the shed is expressed at the UCL, the shed remains compliant.

Sample Locations

Consistent with State Regulations and good sampling theory, the location of the samples was based on professional judgment. In this case, it was FACTs' Industrial Hygienist's professional judgment that authoritative biased sampling would be appropriate.

As such, during this project, the Industrial Hygienist selected those areas which had the highest probability of exhibiting the highest concentrations of contamination. Based on our experience, state of the art information on indoor methamphetamine migration patterns and professional judgment, FACTs selected specific locations throughout the structure in an attempt to represent the highest possible concentrations of methamphetamine. Each sample area was then delineated with a measured outline.

In the figures that follow, the sample locations have been presented. The drawings are stylized and not to scale. In the diagrams, the sample locations are indicated by triangles. Where the identifier has an alpha code, the sample was collected during the cursory evaluation.

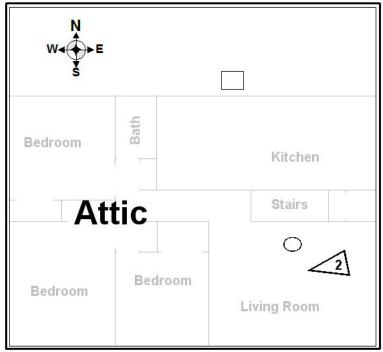


Figure 3
Attic Sample Location

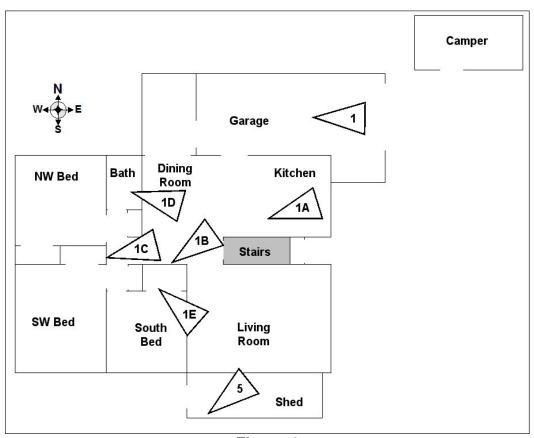


Figure 4
Main Level Sample Locations

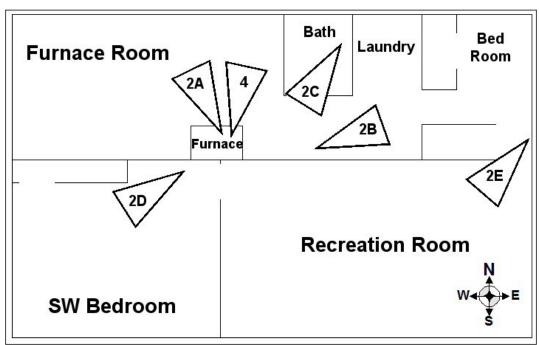


Figure 5
Basement Sample Locations



Identification of Cook/Storage Areas

Colorado Regulations 6 CCR 1014-3 (4.2) states that the Industrial Hygienist is required to perform a:

Review of available law enforcement reports that provide information regarding the manufacturing method, chemicals present, cooking areas, chemical storage areas, and observed areas of contamination or waste disposal

In this case, based on the best information available and based on visual indicators, we were not able to confidently identify *if* manufacturing took place at all, nevermind *where* it may have taken place (if at all). Our best assessment at this point is that the widespread contamination is the result of methamphetamine be smoked at the property. Although it is possible to determine if manufacturing occurred, the question of whether or not methamphetamine was actually manufactured is not of regulatory significance.

Methamphetamine is currently being stored at the property on virtually all surfaces in the structure.

Identification of Contamination Migration

FACTs has knowledge that chemicals such as methamphetamine were stored on the property. However, FACTs must rely exclusively on subjective extant observations we make on site. Based on the best information readily available, FACTs was not able to find any indicators that would suggest contamination migration.

CONCLUSIONS

Based on the totality of the circumstances, including our subjective observations and objective data from sampling, we find that there is insufficient evidence to support the preliminary hypothesis and we accept the null hypothesis and conclude that widespread methamphetamine contamination exists throughout the entire residential structure (but not the exterior shed) of the subject property.

Based on our observations, the entire structure, including all surfaces in the occupiable space, in the attic and in the garage (but excluding the shed), must be cleaned pursuant to 6 CCR 1014-3.

RECOMMENDATION

Universal Site Requirements

Based on our observations, and laboratory results, we recommend standard industry practices for decontamination be followed. The remediation contractor should be given full responsibility for their own standard operating procedures. The following are provided as guidance and reflect standard practices for the remediation of similar



properties. The Governing Body has statutory authority to require a greater degree of decontamination of the subject property.

- 1. An on-site storage container should be established on the grounds (such as a poly lined and covered roll on-roll off container (ro-ro) or temporary trailer).
- 2. The on-site container shall be secured with a padlock at all times when not immediately manned by remediation personnel.
- 3. A licensed contractor, who is trained and experienced in methlab decontamination, as required by State regulations, should be contracted for the decontamination work. All work performed at the residence should be conducted by an experienced contractor whose employees are documented to have been properly trained in accordance with 29 CFR §1910.120 and Colorado Revised Statute §25-18.5-104; *Entry into illegal drug laboratories*.
- 4. We recommend the decontamination process be conducted in Level C PPE ensembles with a minimum of half-face APRs or PAPRs.
- 5. We recommend that a decontamination corridor with showers be established initially at the back door through the garage foyer.
- 6. All remediation work performed at the residence should be conducted under written contract with a reputable remediation company qualified to perform the work.
- 7. All work performed at the residence should be conducted with open communication and cooperation with the Aurora Police Department and the Tri-County Health Department.
- 8. Discovery of any controlled substances shall be immediately reported to the Aurora Police Department.
- 9. Discovery of any contraband shall be immediately reported to the Aurora Police Department.
- 10. All remediation work should be presumed to be pursuant to Title 29 of the Code of Federal Regulations, §1910.120 until otherwise indicated.
- 11. The contractor *shall* be contractually obligated to perform personnel air monitoring for methamphetamine for at least one full shift employee per day to allow for support of proper PPE selection.
- 12. The contractor *should* be contractually obligated to include the personnel air monitoring data in their final documentation.

- 13. Any contractors (and their subcontractors) should be contractually obligated, through a written contract, to decontaminate the subject property to below the statutory limits. Any recleaning required by a contractor (or their subcontractor) pursuant to a failed final assessment should be contractually obligated to be performed at the expense of the contractor.
- 14. Contractors should be contractually obligated to cover industrial hygiene costs of return visits and sample expenses as a result of a failed final clearance(s).
- 15. State regulations prohibit painting or otherwise encapsulating surfaces prior to final clearance sampling by the Industrial Hygienist.
- 16. Following the decontamination process, and prior to the final clearance sampling by the Industrial Hygienist, the remediation contractor/subcontractor shall be contractually obligated to collect a minimum of three QA/QC wipe samples from the subject property, as part of their own QA program, and submit those samples for methamphetamine analysis. The contractor shall be contractually obligated to provide their wipe sampling data (including location of sample, area of sample, and analysis results), to the consulting Industrial Hygienist for review prior to final clearance sampling.
- 17. If the contractor's three QA/QC samples suggest that contamination in the subject property remains at a concentration in excess of $0.25 \,\mu\text{g}/100 \,\text{cm}^2$, the contractor shall be contractually obligated to continue to clean, and sample, until the elevated concentrations are not observed.
- 18. Once the contractor's samples indicate the contamination has been sufficiently reduced, the Industrial Hygienist shall perform final clearance sampling according to 6-CCR 1014-3.

Decontamination of the Residence

In general, decontamination of a forced air furnace system can be difficult, and often impossible. The contractor may propose removal of the furnace and associated ductwork, *in* toto, or may propose cleaning, and decontamination of the ventilation system. If the furnace system is left in place, final clearance sampling will include at least two locations of the furnace duct interiors and may involve composite sampling.

The following decontamination process should take place in this order:

- 1. Establish negative pressure pursuant to State regulations.
- 2. The contractor shall be required to monitor the negative pressure at all times and ensure that the negative pressure (pressure differential) between the work area and adjoining properties, is not less than 0.02 inches of water column at all times.
- 3. Exhaust from the negative enclosure may take place at any exterior location.

- 4. No work, except as needed to establish critical barriers shall begin until negative pressure is established.
- 5. Negative pressure must be maintained at all times until final sampling has been completed and the written intent to issue a Decision Statement has been issued to the contractor by the consulting Industrial Hygienist.
- 6. The contractor should establish a standard, two-chambered decon and/or bagout/load-out at the back, sliding glass door through the garage foyer.
- 7. Window coverings (window blinds) should be discarded.
- 8. All large household appliances (dishwasher, refrigerator, large screen TV, etc) shall be wiped down and salvaged.
- 9. The pergo in each room was installed by the tenant without authorization by the registered owner and may hide additional contamination, drug paraphernalia, or structural damage. All pergo flooring is to be carefully removed to expose the original hardwood flooring, which will be assessed for its condition by the owner upon completion of the decontamination.
- 10. All bathroom exhaust fans and the kitchen exhaust fan shall be removed from their housing, and thoroughly cleaned.
- 11. The entire contents of the attic, including all insulation shall be removed and discarded. All surfaces in the attic shall be vacuumed and wiped down in a normal fashion.
- 12. Carpeting and associated padding should be removed and discarded however, the contractor may propose salvaging the carpet.
- 13. <u>All</u> surfaces in the entire interior space (including the attic and garage), including all ceilings, all hanging fixtures, all cabinets (interior and exterior surfaces), all shelving, all floors, doors, hinges, bathtubs, sinks, appliances (interior and exterior surfaces), and every other interior surface whether specifically mentioned or not, shall be thoroughly wiped down to remove residual contamination.

-*END*-

Enclosures: One CD; Data package, and Appendices



APPENDIX A:

SUPPORTING DOCUMENTS





FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC. CLANDESTINE METHAMPHETAMINE LABORATORY ASSESSMENT FIELD FORMS®

FACTs project name: Vaughn		Form # ML1
Date: January 28, 2011		
Reporting IH:	Caoimhín P. Connell, Forensic IH	

PROPERTY DESCRIPTION:

PROPERTY DESCRIPTION:					
Physical address	3183 Vaughn St, Aurora, CO 80011-2014				
Legal description or VIN	Subdivision: Morris Heights, Filing No. 3, Block 26, Lot 26; Parcel Number: 0182325406022; Account: R0093573				
Registered Property Owner	Paul R Brandt 3183 Vaughn Street Aurora CO 80011				
Number of structures	Three				
Type of Structures	Main Residence	2,715	Square feet		
(Each affected structure will need a	Exterior Shed	75	Square feet		
"Functional Space"	Camper	72	Square feet		
inventory)	Total potential floor space	2,862	Square feet		
Adjacent and/ or surrounding properties	North: Well established residential South: Well established residential East: City street front West: Well established residential				
General Property Observations	Modified residential structure with extensive cosmetic damage. Strong persistent odor of marijuana and unknown source of airborne hydrocarbons. Otherwise fair to good condition.				
Presumed Production Method	Unlawful commercial marijuana grow operation with evidence of Red-P pseudoephedrine reduction and extensive methamphetamine use and storage.				

PLUMBING INSPECTION AND INVENTORY

FACTs project name: Vaughn		Form # ML2
Date: January 28, 2011		
Reporting IH:	Caoimhín P. Connell, Forensic IH	

Functional Space	Room	Fixture	Indicia?	Comments
3	Bathroom # 1	Bath	N	
3	Bathroom # 1	Shower	N	No comment
3	Bathroom # 1	Sink 1	N	No comment
3	Bathroom # 1	Toilet	N	
12	Bathroom # 2	Bath	NA	None – shower stall only
12	Bathroom # 2	Shower	Y	Yellow staining
12	Bathroom # 2	Sink 1	Y	Modified plumbing
12	Bathroom # 3	Toilet	N	No comment
2	Kitchen	Dishwasher	NA	Missing
2	Kitchen	North Sink	N	Plastic P-traps
2	Kitchen	South Sink	N	Plastic P-traps
11	Laundry Room	Slop sink	NA	None
11	Laundry Room	Washing machine	N	No comment

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VENTILATION INSPECTION AND INVENTORY

Item	Y/N	Indicia	Sampled	
itom	1711	?	?	Comments
Isolated AHU?	Υ	Υ		
Common air intake?	N			NA
Common bathroom exhausts?	N			INA
Forced air system?	Υ	Υ	Y	Tape and marijuana
Steam heat?	N			
Common ducts to other properties?	N			
Passive plena to other properties?	N			NA
Active returns to other properties?	N			INA
Passive wall grilles to other properties?	N			
Industrial ventilation?	N			
Residential ventilation?	Υ	Υ	Y	Contaminated with meth
Pressurized structure?	N		•	NA

FUNCTIONAL SPACE INVENTORY

FACTs project name: Vaughn		Form # ML3
Date: January 28, 2011		
Reporting IH:	Caoimhín P. Connell, Forensic IH	

Structure Number	Functional Space Number	Indicia (Y/N)	Describe the functional space (See drawings for delineating structural features)
1	1	Υ	Living room and cloak closet
1	2	Y	Dining room, kitchen, back hall and closets X2
1	3	Y	Ground floor bathroom
1	4	Y	Ground floor northwest bedroom
1	5	Y	Ground floor southwest bedroom
1	6	Y	Ground floor southeast bedroom
1	7	Y	Stairwell
1	8	Y	Basement recreation room
1	9	Y	Basement southwest bedroom and closet
1	10	Y	Basement northeast bedroom and closet
1	11	Y	Basement laundry room hall and furnace room
1	12	Y	Basement bathroom
1	13	Y	Furnace system
1	14	Y	Garage
1	15	Y	Garage foyer
1	16	Y	Attic
2	17	Y	Exterior shed
3	NA	N	Camper - Excluded

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LAW ENFORCEMENT DOCUMENTATION

FACTs project name: Vaughn		Form # ML4
Date: January 28, 2011		
Reporting IH:	Caoimhín P. Connell, Forensio	: IH

Inventory of Reviewed Documents	No documents available		
Described method(s) of production	No documents available		
Chemicals identified by the LEA as being present	No documents available		
Cooking areas identified	No documents available		
Chemical storage areas identified	No documents available		
LE Observation on areas of contamination or waste disposal	No documents available		



FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

January 17, 2011

Officer Serrant Aurora Police Department 15151 E. Alameda Parkway Aurora, CO 80012

Via Fax: 303-739-6055

Dear Off. Serrant:

Forensic Applications, Inc. has been contracted to perform a "Preliminary Assessment" an illegal clandestine drug lab pursuant to Colorado Board Of Health Regulations 6-CCR-1014-3, and CRS §25-18.5-101 *et seq*. The property is located in your jurisdiction at:

3183 Vaughn St. Aurora, CO

As you are aware, as part of that assessment, the Industrial Hygienist is required by regulation 6-CCR-1014-3 (§4.2) to review available Law Enforcement documents associated with the property. Generally, we initially do not require copies of any documents; and, if preferable, we can visit the records offices and review available information there.

We would like to review any narratives regarding controlled substances or hazardous materials responses, or speak with any Law Enforcement personnel who may be familiar with the property. We are only interested in issues involving controlled substances or hazardous materials responses in the last five years. If no such records are available please let us know and we will merely make that notation in our report to Tri-County Health.

We will be performing the on-site assessment on Tuesday, January 18, 2011 and we would like to review any available documents before then. We apologize for the short notice, however, we generally do not have any control over the timeframes involved.

Forensic Applications takes extreme caution to protect all Law Enforcement Sensitive information. When requested by the Law Enforcement Agency, we do NOT reveal names, document identities, or include <u>any</u> information considered sensitive by an investigating agency. We have developed a close working relationship with Aurora Police Department, and we value and respect that open line of communication. I have included my SOQ. Please feel free to call me directly with any comments or questions.

Pursuant to CRS §24-72-305.5, I affirm that upon receipt of requested records of official actions and/or criminal justice records from the Aurora Police Department, such records shall not be used for the direct solicitation of business for pecuniary gain.

Sincerely,

Caoimhín P. Connell Forensic Industrial Hygienist



FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

January 13, 2011

Cheryl Spottke Manager, Records Adams County Sheriff's Office 4201 East 72nd Avenue, Unit C Commerce City, Colorado 80022

Via Fax: 720-322-1333

Dear Ms. Spottke:

Forensic Applications, Inc. has been contracted to perform a "Preliminary Assessment" an illegal clandestine drug lab pursuant to Colorado Board Of Health Regulations 6-CCR-1014-3, and CRS §25-18.5-101 *et seq*. The property is located in Adams County at:

3183 Vaughn St. Aurora, CO

As you are aware, as part of that assessment, the Industrial Hygienist is required by regulation 6-CCR-1014-3 (§4.2) to review available Law Enforcement documents associated with the property. Generally, we initially do not require copies of any documents; and, if preferable, (as we have done in the past), we can visit the records offices and review available information there.

We would like to review any narratives regarding controlled substances or hazardous materials responses, or speak with any Law Enforcement personnel who may be familiar with the property. We are only interested in issues involving controlled substances or hazardous materials responses in the last five years. If no such records are available please let us know and we will merely make that notation in our report to the Tri-County Health Department.

We will be performing the on-site assessment on about January 18, 2011 and we would like to review any available documents before then. We apologize for the short notice, however, we generally do not have any control over the timeframes involved.

Forensic Applications takes extreme caution to protect all Law Enforcement Sensitive information. When requested by the Law Enforcement Agency, we do NOT reveal names, document identities, or include <u>any</u> information considered sensitive by an investigating agency. We have developed a close working relationship with Adams County SO, and we value and respect that open line of communication. I have included my SOQ. Please feel free to call me directly with any comments or questions.

Pursuant to CRS §24-72-305.5, I affirm that upon receipt of requested records of official actions and/or criminal justice records from the ACSO, such records shall not be used for the direct solicitation of business for pecuniary gain.

Sincerely,

Caoimhín P. Connell Forensic Industrial Hygienist



FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC. CONSULTANT STATEMENT OF QUALIFICATIONS

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

(1.1.1)					
FACTs project name:	Vaughn Form # ML15				
Date January 13, 2011					
Reporting IH:	Caoimhín P. Connell, Forensic I	Н			

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 260 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, US Air Force, 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 the Industrial Hygiene 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 condominia. Mr. Connell has conducted over 220 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.



FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

January 13, 2011

Deanne Kelly Solid Waste Specialist Tri-county Health 4201 E. 72nd Ave. Commerce City, CO 80022

Via Fax: 303-220-9208

Dear Ms. Kelly:

Forensic Applications, Inc. has been contracted to perform a "Preliminary Assessment" an illegal clandestine drug lab pursuant to Colorado Board Of Health Regulations 6-CCR-1014-3, and CRS §25-18.5-101 *et seq*. The property is located in your jurisdiction at:

3183 Vaughn St. Aurora, CO

As you are aware, as part of that assessment, the Industrial Hygienist is required by regulation 6-CCR-1014-3 (§4.2) to review available Law Enforcement documents associated with the property. Generally, we initially do not require copies of any documents; and, if preferable, we can visit the records offices and review available information there.

We would like to review any narratives regarding controlled substances or hazardous materials responses, or speak with any TCHD personnel who may be familiar with the property. We are only interested in issues involving controlled substances or hazardous materials responses in the last five years. If no such records are available please let us know and we will merely make that notation in our report.

We will be performing the on-site assessment on Tuesday January18, 2011 and would like to review any available documents before then. We apologize for the short notice, however, we generally do not have any control over the timeframes involved.

Forensic Applications takes extreme caution to protect all regulatory sensitive information. When requested by the Agency, we do NOT reveal names, document identities, or include <u>any</u> information considered sensitive by an investigating agency. We have developed a close working relationship with Health Departments across the state, and we value and respect that open line of communication.

Pursuant to CRS §24-72-305.5, I affirm that upon receipt of requested records of official actions and/or criminal justice records from the TCHD, such records shall not be used for the direct solicitation of business for pecuniary gain.

Sincerely,

Caoimhín P. Connell Forensic Industrial Hygienist

Dear Caoimhín P. Connell,

Re: TCHD

The 2 page fax you sent through eFax.com to 13032209208 was successfully transmitted at 2011-01-13 21:56:22 (GMT).

The length of transmission was 71 seconds.

The receiving machine's fax $\ensuremath{\mathsf{ID}}$: .

Best Regards,

If you need additional assistance, please visit our online help center at http://www.efax.com/help/. Thank you for using the eFax service.

eFax.com

Customer Service
Online Help: http://www.efax.com/help/
Tel: 323-817-3205 (US) or 0870 711 2211 (UK)
Email: help@mail.efax.com

FIELD OBSERVATIONS

FACTs project name: V	aughn	Form # ML5
Date: January 28, 2011		
Reporting IH:	Caoimhín P. Connell, Forensi	c IH

Structure:

Indicator	Functional Space	Indicator	Functional Space
Acids	No comment	Match components	No comment
Aerosol cans	12① ,14①, 17①	Mercury	No comment
Alcohols (MeOH, EtOH)	No comment	Methamphetamine	All areas
Ammonia	No comment	Modified coolers/containers	No comment
Ammunition	No comment	Modified electrical	11
Artistic expressions	5,6,7,9	Modified plumbing	12
Bags of salt	No comment	Modified structure	1,3,4,9,10
Bases	No comment	Modified ventilation	11
Basters/Pipettes	No comment	Needles/Syringes	No comment
Batteries	No comment	OTC Containers	No comment
Bi-phasic wastes	No comment	OTC drugs	3
Booby traps	No comment	pH papers/indicators	No comment
Bullet holes	No comment	Phenyl-2-propanone	No comment
Burn marks	11	Pornography, Sex toys	No comment
Cat litter	No comment	Prescription drugs	No comment
Chemical storage	12① ,14①, 17①	Presence of cats	No comment
Colored wastes	No comment	Propane bottles	No comment
Corrosion on surfaces	No comment	Pseudoephedrine	No comment
Death bag	No comment	Red P	No comment
Delaminating paint	No comment	Red Staining	No comment
Drug paraphernalia	No comment	Salters	No comment
Empty OTC Containers	No comment	Security devices	No comment
Ephedrine	No comment	Signs of violence	3,4,12
Feces	No comment	Smoke detectors disabled	No comment
Filters	16	Solvents - (organic)	12① ,14①, 17①
Forced entry marks	4	Squalor	12
Gang markings	No comment	Staining on floors	1,2,4,7
Gas cylinders	No comment	Staining on walls or ceiling	1,2,12
Gerry cans	No comment	Stash holes	No comment
Glassware	No comment	Structure damage	1,4,8,9,10,11
Graffiti	No comment	Taping on surfaces	1,4,7,10,11,14
Heating mantle	No comment	Tubing	17
Hidden items	16	Urine containers	No comment
Hydrogen carbons②	4 ppm all areas	Wall anchors	1,4,7,10,11
lodine	No comment	Wall coverings	14
Lead	No comment	Weapons	No comment
Lithium	No comment	Window block material	1,4,10,14,17
	All areas except		
Marijuana	shed	Yellow staining	1,2,10

① Present but not as indicia



② Relative to toluene

③ Present in normal household expectations

Modified in manner consistent with clanlab use

INDIVIDUAL SEWAGE DISPOSAL SYSTEM FIELD FORM

FACTs project name: Vaughn		Form # ML7
Date: January 28, 2011		
Reporting IH:	Caoimhín P. Connell, Forensic IH	

	Yes	No	N/C
Does the property have an ISDS		Х	
Is there unusual staining around internal drains	X		
Are solvent odors present from the internal drains	X		
Is there evidence of wastes being disposed down internal drains	X		
Are solvent odors present from the external sewer drain stacks			Х
Was the septic tank lid(s) accessible			
Was the leach field line accessible			
Was the septic tank <u>or</u> leach field lines opened			
Are solvent odors present from the leach field lines (if "yes" see below)			
Are solvent odors present from the septic tank (if "yes" see below)			
Is "slick" present in the septic tank		NA	
Are biphasic (aqueous-organic) layers present in the septic tank			
Was pH measured in the septic tank			
Were organic vapors measured in the septic tank (if "yes" see below)			
Is sampling of the ISDS warranted			
Were calawasi/drum thief samples collected from the septic tank			
*NC = Not abacked	•		

^{*}NC = Not checked

Qualitative Organic Vapor Monitoring

Instrument Type	Make and Model
Hydrocarbon detector	EnMet Target Series, MOS detector

Location	MOS*	PID*	FID*
Basement bathroom sink	2 ppm		
All other internal drains and sinks	<1 ppm	N	٨
] 'N	A
		1	

^{*}Units of measurement are in parts per million equivalents compared to the toluene calibration vapor. Detection limit 1 ppm

Locator Notes:

City Sewer – no locator notes.



FACTs project name	e: Vaughn	Form # ML8	
Date: January 28, 20	11		
Reporting IH:	Caoimhín P. Conn	Caoimhín P. Connell, Forensic IH	

Name	Date taken	Name	Date taken
2nd Linen Closet	1/18/2011 13:39 PM	Bath Bsmnt (2)	1/18/2011 13:45 PM
2nd Linen Closet 2	1/18/2011 13:39 PM	Bath Bsmnt (3)	1/18/2011 13:46 PM
Attic		Bath Bsmnt (4)	1/18/2011 13:46 PM
Attic (2)	1/18/2011 14:41 PM	Bath Bsmnt (5)	1/18/2011 13:46 PM
Attic (3)	1/18/2011 14:41 PM	Bath Bsmnt (6)	1/18/2011 13:46 PM
Attic (4)	1/18/2011 14:42 PM	Bath Bsmnt (7)	1/18/2011 13:46 PM
Attic (5)	1/18/2011 14:45 PM	Bath Bsmnt (8)	1/18/2011 13:46 PM
Attic (6)	1/18/2011 14:45 PM	Bath Bsmnt (9)	1/18/2011 13:46 PM
Attic (7)	1/18/2011 14:45 PM	Bath Bsmnt (10)	1/18/2011 13:46 PM
Attic (8)	1/18/2011 14:45 PM	Bath Bsmnt (11)	1/18/2011 13:46 PM
Attic (9)	1/18/2011 14:45 PM	Bath Bsmnt (12)	1/18/2011 13:46 PM
Attic (10)	1/18/2011 14:49 PM	Bath Bsmnt (13)	1/18/2011 13:46 PM
Attic (11)	1/18/2011 14:49 PM	Bath Bsmnt (14)	1/18/2011 14:23 PM
Attic (12)	1/18/2011 14:50 PM	Bath Bsmnt (15)	1/18/2011 14:23 PM
Attic (13)	1/18/2011 14:50 PM	Bath Bsmnt (16)	1/18/2011 14:23 PM
Attic (14)	1/18/2011 14:51 PM	Bath Bsmnt (17)	1/18/2011 14:23 PM
Attic (15)	1/18/2011 14:51 PM	Bath Bsmnt (18)	1/18/2011 14:24 PM
Attic (16)	1/18/2011 14:55 PM	Bath Bsmnt (19)	1/18/2011 14:24 PM
Attic (17)	1/18/2011 14:55 PM	Bath Bsmnt (20)	1/18/2011 14:24 PM
Attic (18)	1/18/2011 14:55 PM	Bath Bsmnt (21)	1/18/2011 14:24 PM
Attic (19)	1/18/2011 14:55 PM	Bath Bsmnt (22)	1/18/2011 14:24 PM
Attic Entrance	1/18/2011 14:04 PM	Bath Bsmnt (23)	1/18/2011 14:24 PM

FACTs project name: Vau	ıghn	Form # ML8
Date: January 28, 2011		
Reporting IH:	Caoimhín P. Connell, Forensi	c IH

Name	Date taken	Name	Date taken
Bath US	1/18/2011 13:36 PM	Door to Garage	1/18/2011 14:04 PM
Bath US (2)	1/18/2011 13:36 PM	Door to Garage (2)	1/18/2011 14:04 PM
Bath US (3)	1/18/2011 13:36 PM	Door to Garage (3)	1/18/2011 14:31 PM
Bath US (4)	1/18/2011 13:36 PM	S DS Bath sink	
Bath US (5)	1/18/2011 13:36 PM	Exterior	1/18/2011 13:03 PM
Bath US (6)	1/18/2011 13:37 PM	Exterior (2)	1/18/2011 13:03 PM
Bath US (7)	1/18/2011 13:37 PM	Exterior (3)	1/18/2011 13:04 PM
Bath US (8)	1/18/2011 13:37 PM	Exterior (4)	1/18/2011 13:04 PM
Bath US (9)	1/18/2011 13:37 PM	Exterior (5)	1/18/2011 13:05 PM
Bath US (10)	1/18/2011 13:37 PM	Exterior (6)	1/18/2011 13:05 PM
Bath US (11)	1/18/2011 13:37 PM	Exterior (7)	1/18/2011 13:06 PM
Bath US (12)	1/18/2011 13:37 PM	Exterior (8)	1/18/2011 13:05 PM
Bath US (13)	1/18/2011 13:37 PM	Exterior (9)	1/18/2011 13:08 PM
Bdrm Hall	1/18/2011 13:39 PM	Exterior (10)	1/18/2011 13:08 PM
Bdrm Hall 2	1/18/2011 13:39 PM	Exterior (11)	1/18/2011 13:08 PM
Bdrm Hall 3	1/18/2011 13:42 PM	Exterior (12)	1/18/2011 13:08 PM
Bdrm Hall 4	1/18/2011 13:42 PM	Exterior (13)	1/18/2011 13:08 PM
Bsmt NE BR closet		Exterior (14)	1/18/2011 13:09 PM
Dining Room	1/18/2011 13:33 PM	Exterior (15)	1/18/2011 13:09 PM
Dining Room 4	1/18/2011 13:33 PM	Exterior (16)	1/18/2011 13:09 PM
Dining Room (2)	1/18/2011 13:33 PM	Exterior (17)	1/18/2011 13:09 PM
Dining Room (3)	1/18/2011 13:33 PM	Exterior (18)	1/18/2011 13:09 PM

FACTs project name: Vaughn		Form # ML8
Date: January 28, 20)11	
Reporting IH:	Caoimhín P. Coi	nnell, Forensic IH

Name	Date taken	Name	Date taken
Exterior (19)	1/18/2011 13:09 PM	Exterior (41)	1/18/2011 14:13 PM
Exterior (20)	1/18/2011 13:10 PM	Exterior (42)	1/18/2011 14:13 PM
Exterior (21)	1/18/2011 13:10 PM	Exterior (43)	1/18/2011 14:13 PM
Exterior (22)	1/18/2011 14:16 PM	Exterior (44)	1/18/2011 14:13 PM
Exterior (23)	1/18/2011 14:16 PM	Exterior (45)	1/18/2011 14:13 PM
Exterior (24)	1/18/2011 14:16 PM	Foyer	
Exterior (25)	1/18/2011 14:17 PM	Front Entrance	1/18/2011 14:22 PM
Exterior (26)	1/18/2011 13:10 PM	Front Entrance (2)	1/18/2011 14:22 PM
Exterior (27)	1/18/2011 13:10 PM	Furnace Floor	1/18/2011 15:17 PM
Exterior (28)	1/18/2011 13:24 PM	Furnace Rm	1/18/2011 13:45 PM
Exterior (29)	1/18/2011 13:24 PM	Furnace Rm (2)	1/18/2011 13:45 PM
Exterior (30)	1/18/2011 13:25 PM	Furnace Rm (3)	1/18/2011 13:46 PM
Exterior (31)	1/18/2011 13:25 PM	Furnace Rm (4)	1/18/2011 13:46 PM
Exterior (32)	1/18/2011 14:10 PM	Furnace Rm (5)	1/18/2011 13:47 PM
Exterior (33)	1/18/2011 14:11 PM	Furnace Rm (6)	1/18/2011 13:47 PM
Exterior (34)	1/18/2011 14:11 PM	Furnace Rm (7)	1/18/2011 13:47 PM
Exterior (35)	1/18/2011 14:11 PM	Furnace Rm (8)	1/18/2011 13:47 PM
Exterior (36)	1/18/2011 14:11 PM	Furnace Rm (9)	1/18/2011 13:47 PM
Exterior (37)	1/18/2011 14:12 PM	Furnace Rm (10)	1/18/2011 13:47 PM
Exterior (38)	1/18/2011 14:12 PM	Furnace Rm (11)	1/18/2011 13:47 PM
Exterior (39)	1/18/2011 14:12 PM	Furnace Rm (12)	1/18/2011 13:47 PM
Exterior (40)	1/18/2011 14:12 PM	Furnace Rm (13)	1/18/2011 13:47 PM

FACTs project name: Vaughn		Form # ML8
Date: January 28, 2011		
Reporting IH:	Caoimhín P. Connell, Forensic IH	

Name	Date taken	Name	Date taken
Furnace Rm (14)	1/18/2011 13:48 PM	Garage (4)	1/18/2011 14:04 PM
Furnace Rm (15)	1/18/2011 13:48 PM	Garage (5)	1/18/2011 14:04 PM
Furnace Rm (16)	1/18/2011 13:48 PM	Garage (6)	1/18/2011 14:04 PM
Furnace Rm (17)	1/18/2011 13:48 PM	Garage (7)	1/18/2011 14:04 PM
Furnace Rm (18)	1/18/2011 13:48 PM	Garage (8)	1/18/2011 14:05 PM
Furnace Rm (19)	1/18/2011 13:48 PM	Garage (9)	1/18/2011 14:05 PM
Furnace Rm (20)	1/18/2011 13:48 PM	Garage (10)	1/18/2011 14:05 PM
Furnace Rm (21)	1/18/2011 13:48 PM	Garage (11)	1/18/2011 14:05 PM
Furnace Rm (22)	1/18/2011 13:48 PM	Garage (12)	1/18/2011 14:05 PM
Furnace Rm (23)	1/18/2011 13:49 PM	Garage (13)	1/18/2011 14:05 PN
Furnace Rm (24)	1/18/2011 13:49 PM	Garage (14)	1/18/2011 14:05 PN
Furnace Rm (25)	1/18/2011 13:49 PM	Garage (15)	1/18/2011 14:05 PN
Furnace Rm (26)	1/18/2011 13:49 PM	Garage (16)	1/18/2011 14:06 PM
Furnace Rm (27)	1/18/2011 14:00 PM	Garage (17)	1/18/2011 14:06 PM
Furnace Rm (28)	1/18/2011 14:02 PM	Garage (18)	1/18/2011 14:06 PN
Furnace Rm (29)	1/18/2011 14:02 PM	Garage (19)	1/18/2011 14:06 PM
Furnace Rm (30)	1/18/2011 14:03 PM	Garage (20)	1/18/2011 14:06 PN
Furnace room		Garage (21)	1/18/2011 14:08 PM
■ Garage		Garage (22)	1/18/2011 14:08 PN
Garage 2		Garage (23)	1/18/2011 14:31 PM
Garage (2)	1/18/2011 14:04 PM	Garage (24)	1/18/2011 14:32 PN
Garage (3)	1/18/2011 14:04 PM	Garage (25)	1/18/2011 14:32 PM

FACTs project name	e: Vaughn	Form # ML8	
Date: January 28, 2011			
Reporting IH:	Caoimhín P. Conn	Caoimhín P. Connell, Forensic IH	

Name	Date taken	Name	Date taken
Garage (26)	1/18/2011 14:32 PM	Kitchen (2)	1/18/2011 13:34 PM
Carage (27)	1/18/2011 14:32 PM	Kitchen (3)	1/18/2011 13:34 PM
🔀 Garage (28)	1/18/2011 14:32 PM	Kitchen (4)	1/18/2011 13:34 PM
Sarage (29)	1/18/2011 14:32 PM	Kitchen (5)	1/18/2011 13:34 PM
Sarage (30)	1/18/2011 14:32 PM	Kitchen (6)	1/18/2011 13:34 PM
Garge Foyer	1/18/2011 14:06 PM	Kitchen (7)	1/18/2011 13:34 PM
Carge Foyer (2)	1/18/2011 14:07 PM	Kitchen (8)	1/18/2011 13:34 PM
Garge Foyer (3)	1/18/2011 14:07 PM	Kitchen (9)	1/18/2011 13:34 PM
Garge Foyer (4)	1/18/2011 14:07 PM	Kitchen (10)	1/18/2011 13:35 PM
Garge Foyer (5)	1/18/2011 14:07 PM	Kitchen (11)	1/18/2011 13:35 PM
Garge Foyer (6)	1/18/2011 14:07 PM	Kitchen (12)	1/18/2011 13:35 PM
Garge Foyer (7)	1/18/2011 14:07 PM	Kitchen (13)	1/18/2011 13:35 PM
Garge Foyer (8)	1/18/2011 14:07 PM	Kitchen (14)	1/18/2011 15:52 PM
Garge Foyer (9)	1/18/2011 14:07 PM	Kitchen (15)	1/18/2011 15:52 PM
Garge Foyer (10)	1/18/2011 14:07 PM	Kitchen (16)	1/18/2011 15:52 PM
Garge Foyer (11)	1/18/2011 14:07 PM	Laundry	1/18/2011 13:44 PM
Garge Foyer (12)	1/18/2011 14:07 PM	Laundry (2)	1/18/2011 13:44 PM
Garge Foyer (13)	1/18/2011 14:08 PM	Laundry (3)	1/18/2011 13:44 PM
Garge Foyer (14)	1/18/2011 14:08 PM	Laundry (4)	1/18/2011 13:45 PM
Nallway US	1/18/2011 13:33 PM	Laundry (5)	1/18/2011 13:45 PM
Hallway US (2)	1/18/2011 13:33 PM	Laundry (6)	1/18/2011 13:45 PM
Kitchen	1/18/2011 13:33 PM	Laundry (7)	1/18/2011 13:49 PM

FACTs project name: Vaughn		Form # ML8
Date: January 28, 2011		
Reporting IH:	Caoimhín P. Connell, Forensic IH	

Name	Date taken	Name	Date taken
Laundry (8)	1/18/2011 13:49 PM	Living Room (14)	1/18/2011 15:48 PM
Laundry (9)	1/18/2011 13:55 PM	LR ceiling damage	1/18/2011 15:47 PM
Laundry (10)	1/18/2011 13:55 PM	LR ceiling damage (2)	1/18/2011 15:47 PM
Laundry (11)	1/18/2011 13:56 PM	LR ceiling damage (3)	1/18/2011 15:47 PM
Laundry (12)	1/18/2011 13:56 PM	LR ceiling damage (4)	1/18/2011 15:47 PM
Laundry (13)	1/18/2011 13:56 PM	LR ceiling damage (5)	1/18/2011 15:47 PM
Laundry (14)	1/18/2011 14:00 PM	MVI_6011	
Linen Closet	1/18/2011 13:37 PM	MVI_6011.THM	
Linen Closet 2	1/18/2011 13:37 PM	NE Bdrm Bsmnt	1/18/2011 13:43 PM
Living Room	1/18/2011 13:32 PM	NE Bdrm Bsmnt (2)	1/18/2011 13:43 PM
Living Room (2)	1/18/2011 13:32 PM	NE Bdrm Bsmnt (3)	1/18/2011 13:43 PM
Living Room (3)	1/18/2011 13:32 PM	NE Bdrm Bsmnt (4)	1/18/2011 13:43 PM
Living Room (4)	1/18/2011 13:32 PM	NE Bdrm Bsmnt (5)	1/18/2011 13:43 PM
Living Room (5)	1/18/2011 13:32 PM	NE Bdrm Bsmnt (6)	1/18/2011 13:43 PM
Living Room (6)	1/18/2011 13:32 PM	NE Bdrm Bsmnt (7)	1/18/2011 13:44 PM
Living Room (7)	1/18/2011 13:32 PM	NE Bdrm Bsmnt (8)	1/18/2011 13:44 PM
Living Room (8)	1/18/2011 13:32 PM	NE Bdrm Bsmnt (9)	1/18/2011 13:44 PM
Living Room (9)	1/18/2011 13:32 PM	NE Bdrm Bsmnt (10)	1/18/2011 13:44 PM
Living Room (10)	1/18/2011 13:33 PM	NE Bdrm Bsmnt (11)	1/18/2011 13:44 PM
Living Room (11)	1/18/2011 13:32 PM	NE Bdrm Bsmnt (12)	1/18/2011 13:44 PM
Living Room (12)	1/18/2011 15:48 PM	NE Bdrm Bsmnt (13)	1/18/2011 13:44 PM
Living Room (13)	1/18/2011 15:48 PM	NE Bdrm Bsmnt (14)	1/18/2011 13:58 PM

FACTs project name: Vaughn		Form # ML8
Date: January 28, 2011		
Reporting IH:	Caoimhín P. Connell, Forensi	c IH

Name	Date taken	Name	Date taken
NE Bdrm Bsmnt (15)	1/18/2011 13:58 PM	NW Bdrm US (14)	1/18/2011 13:39 PM
NE Bdrm Bsmnt (16)	1/18/2011 13:58 PM	NW Bdrm US (15)	1/18/2011 13:39 PM
NE Bdrm Bsmnt (17)	1/18/2011 13:58 PM	NW Bdrm US (16)	1/18/2011 13:51 PM
NE Bdrm Bsmnt (18)	1/18/2011 13:58 PM	NW Bdrm US (17)	1/18/2011 13:51 PM
NE Bdrm Bsmnt (19)	1/18/2011 13:58 PM	NW Bdrm US (18)	1/18/2011 13:51 PM
NE Bdrm Bsmnt (20)	1/18/2011 13:58 PM	NW Bdrm US (19)	1/18/2011 13:51 PM
NE Bdrm Bsmnt (21)	1/18/2011 13:58 PM	NW Bdrm US (20)	1/18/2011 13:51 PM
NE Bdrm Bsmnt (22)	1/18/2011 13:58 PM	NW Bdrm US (21)	1/18/2011 13:51 PM
NE Bdrm Bsmnt (23)	1/18/2011 13:59 PM	NW Bdrm US (22)	1/18/2011 13:51 PM
NW Bdrm US	1/18/2011 13:38 PM	NW Bdrm US (23)	1/18/2011 13:51 PM
NW Bdrm US (2)	1/18/2011 13:38 PM	NW Bdrm US (24)	1/18/2011 13:52 PM
NW Bdrm US (3)	1/18/2011 13:38 PM	NW Bdrm US (25)	1/18/2011 13:52 PM
NW Bdrm US (4)	1/18/2011 13:38 PM	NW Bdrm US (26)	1/18/2011 13:52 PM
NW Bdrm US (5)	1/18/2011 13:38 PM	NW Bdrm US (27)	1/18/2011 13:52 PM
NW Bdrm US (6)	1/18/2011 13:38 PM	NW BR W wall	
NW Bdrm US (7)	1/18/2011 13:38 PM	NW BR W wall 2	
NW Bdrm US (8)	1/18/2011 13:38 PM	Project Gloves	1/18/2011 15:57 PM
NW Bdrm US (9)	1/18/2011 13:38 PM	Rec Room Bsmnt	1/18/2011 13:45 PM
NW Bdrm US (10)	1/18/2011 13:39 PM	Rec Room Bsmnt (2)	1/18/2011 13:45 PM
NW Bdrm US (11)	1/18/2011 13:39 PM	Rec Room Bsmnt (3)	1/18/2011 13:56 PM
NW Bdrm US (12)	1/18/2011 13:39 PM	Rec Room Bsmnt (4)	1/18/2011 13:56 PM
NW Bdrm US (13)	1/18/2011 13:39 PM	Rec Room Bsmnt (5)	1/18/2011 13:56 PM

FACTs project name: Vaughn		Form # ML8
Date: January 28, 2011		
Reporting IH:	Caoimhín P. Connell, Forensi	c IH

Name	Date taken	Name	Date taken
Rec Room Bsmnt (6)	1/18/2011 13:56 PM	Sample 1 (4)	1/18/2011 14:36 PM
Rec Room Bsmnt (7)	1/18/2011 13:57 PM	Sample 1 (5)	1/18/2011 14:37 PM
Rec Room Bsmnt (8)	1/18/2011 13:57 PM	Sample 1 (6)	1/18/2011 14:37 PM
Rec Room Bsmnt (9)	1/18/2011 13:57 PM	Sample 1 (7)	1/18/2011 14:40 PM
Rec Room Bsmnt (10)	1/18/2011 13:57 PM	Sample 1	1/18/2011 14:34 PM
Rec Room Bsmnt (11)	1/18/2011 13:57 PM	Sample 2	1/18/2011 14:44 PM
Rec Room Bsmnt (12)	1/18/2011 13:57 PM	Sample 4 (2)	1/18/2011 15:06 PM
Rec Room Bsmnt (13)	1/18/2011 13:57 PM	Sample 4 (3)	1/18/2011 15:07 PM
Rec Room Bsmnt (14)	1/18/2011 13:57 PM	Sample 4 (4)	1/18/2011 15:07 PM
Rec Room Bsmnt (15)	1/18/2011 13:59 PM	Sample 4 (5)	1/18/2011 15:07 PM
Rec Room Bsmnt (16)	1/18/2011 13:59 PM	Sample 4 (6)	1/18/2011 15:08 PM
Rec Room Bsmnt (17)	1/18/2011 13:59 PM	Sample 4 (7)	1/18/2011 15:10 PM
Rec Room Bsmnt (18)	1/18/2011 13:59 PM	Sample 4 (8)	1/18/2011 15:10 PM
Rec Room Bsmnt (19)	1/18/2011 13:59 PM	Sample 4 (9)	1/18/2011 15:10 PM
Rec Room Bsmnt (20)	1/18/2011 13:59 PM	Sample 4 (10)	1/18/2011 15:10 PM
Rec Room Bsmnt (21)	1/18/2011 13:59 PM	Sample 4 (11)	1/18/2011 15:11 PM
Rec Room Bsmnt (22)	1/18/2011 13:59 PM	Sample 4 (12)	1/18/2011 15:11 PM
Rec Room Bsmnt (23)	1/18/2011 14:00 PM	Sample 4 (13)	1/18/2011 15:13 PM
Rec Room Bsmnt (24)	1/18/2011 14:02 PM	Sample 4 (14)	1/18/2011 15:13 PM
Rec Room Bsmnt (25)	1/18/2011 14:02 PM	Sample 4	1/18/2011 15:05 PM
Sample 1 (2)	1/18/2011 14:34 PM	Sample 5 (2)	1/18/2011 15:21 PM
Sample 1 (3)	1/18/2011 14:34 PM	Sample 5 (3)	1/18/2011 15:23 PM

FACTs project name: Vaughn		Form # ML8
Date: January 28, 2011		
Reporting IH:	Caoimhín P. Connell, Forensi	c IH

Name	Date taken	Name	Date taken
Sample 5 (4)	1/18/2011 15:24 PM	Shed (17)	1/18/2011 14:16 PM
Sample 5 (5)	1/18/2011 15:24 PM	Shed (18)	1/18/2011 14:16 PM
Sample 5 (6)	1/18/2011 15:24 PM	So Bdrm US	1/18/2011 13:41 PM
Sample 5 (7)	1/18/2011 15:24 PM	So Bdrm US (2)	1/18/2011 13:41 PM
Sample 5 (8)	1/18/2011 15:24 PM	So Bdrm US (3)	1/18/2011 13:41 PM
Sample 5	1/18/2011 15:21 PM	So Bdrm US (4)	1/18/2011 13:41 PM
Shed Shed	1/18/2011 14:14 PM	So Bdrm US (5)	1/18/2011 13:41 PM
Shed (2)	1/18/2011 14:14 PM	So Bdrm US (6)	1/18/2011 13:41 PM
Shed (3)	1/18/2011 14:14 PM	So Bdrm US (7)	1/18/2011 13:41 PM
Shed (4)	1/18/2011 14:14 PM	So Bdrm US (8)	1/18/2011 13:42 PM
Shed (5)	1/18/2011 14:14 PM	So Bdrm US (9)	1/18/2011 13:42 PM
Shed (6)	1/18/2011 14:14 PM	So Bdrm US (10)	1/18/2011 13:42 PM
Shed (7)	1/18/2011 14:15 PM	So Bdrm US (11)	1/18/2011 13:42 PM
Shed (8)	1/18/2011 14:15 PM	So Bdrm US (12)	1/18/2011 13:42 PM
Shed (9)	1/18/2011 14:15 PM	So Bdrm US (13)	1/18/2011 13:42 PM
Shed (10)	1/18/2011 14:15 PM	So Bdrm US (14)	1/18/2011 13:42 PM
Shed (11)	1/18/2011 14:15 PM	Stairs DS	1/18/2011 13:36 PM
Shed (12)	1/18/2011 14:15 PM	Stairs DS (2)	1/18/2011 13:36 PM
Shed (13)	1/18/2011 14:15 PM	Stairs DS (3)	1/18/2011 13:42 PM
Shed (14)	1/18/2011 14:16 PM	Stairs DS (4)	1/18/2011 13:42 PM
Shed (15)	1/18/2011 14:16 PM	Stairs DS (5)	1/18/2011 13:43 PM
Shed (16)	1/18/2011 14:16 PM	Stairs DS (6)	1/18/2011 13:43 PM

FACTs project name: Vaughn		Form # ML8
Date: January 28, 2011		
Reporting IH:	Caoimhín P. Connell, Forensi	c IH

Name	Date taken	Name	Date taken
Stairs DS (7)	1/18/2011 15:51 PM	SW Bdrm Bsmnt (19)	1/18/2011 14:02 PM
Stairs DS (8)	1/18/2011 15:51 PM	SW Bdrm US	1/18/2011 13:39 PM
Stairs DS (9)	1/18/2011 15:51 PM	SW Bdrm US (2)	1/18/2011 13:40 PM
SW Bdrm Bsmnt	1/18/2011 14:00 PM	SW Bdrm US (3)	1/18/2011 13:40 PM
SW Bdrm Bsmnt (2)	1/18/2011 14:00 PM	SW Bdrm US (4)	1/18/2011 13:40 PM
SW Bdrm Bsmnt (3)	1/18/2011 14:00 PM	SW Bdrm US (5)	1/18/2011 13:40 PM
SW Bdrm Bsmnt (4)	1/18/2011 14:00 PM	SW Bdrm US (6)	1/18/2011 13:40 PM
SW Bdrm Bsmnt (5)	1/18/2011 14:01 PM	SW Bdrm US (7)	1/18/2011 13:40 PM
SW Bdrm Bsmnt (6)	1/18/2011 14:01 PM	SW Bdrm US (8)	1/18/2011 13:40 PM
SW Bdrm Bsmnt (7)	1/18/2011 14:01 PM	SW Bdrm US (9)	1/18/2011 13:40 PM
SW Bdrm Bsmnt (8)	1/18/2011 14:01 PM	SW Bdrm US (10)	1/18/2011 13:40 PM
SW Bdrm Bsmnt (9)	1/18/2011 14:01 PM	SW Bdrm US (11)	1/18/2011 13:40 PM
SW Bdrm Bsmnt (10)	1/18/2011 14:01 PM	SW Bdrm US (12)	1/18/2011 13:41 PM
SW Bdrm Bsmnt (11)	1/18/2011 14:01 PM	SW Bdrm US (13)	1/18/2011 13:41 PM
SW Bdrm Bsmnt (12)	1/18/2011 14:01 PM	SW Bdrm US (14)	1/18/2011 13:41 PM
SW Bdrm Bsmnt (13)	1/18/2011 14:01 PM	Under Stairs Bsmnt	1/18/2011 13:45 PM
SW Bdrm Bsmnt (14)	1/18/2011 14:01 PM	Under Stairs Bsmnt (2)	1/18/2011 13:45 PM
SW Bdrm Bsmnt (15)	1/18/2011 14:01 PM	Under Stairs Bsmnt (3)	1/18/2011 13:56 PM
		Under Stairs Bsmnt (4)	1/18/2011 13:56 PM
SW Bdrm Bsmnt (16)	1/18/2011 14:02 PM 1/18/2011 14:02 PM	■ Vent Investigation	1/18/2011 15:40 PM
SW Bdrm Bsmnt (17)	The second secon	Vent Investigation (2)	1/18/2011 15:40 PM
SW Bdrm Bsmnt (18)	1/18/2011 14:02 PM	Vent Investigation (3)	1/18/2011 15:40 PM
SW Bdrm Bsmnt (19)	1/18/2011 14:02 PM		

CONTAMINANT MIGRATION OBSERVATIONS

FACTs project name: Vau	ıghn	Form # ML6
Date: January 28, 2011		
Reporting IH:	Caoimhín P. Connell, Forensi	c IH

Describe/identify adjacent areas where contaminants may have migrated.

See Body of Report

DRAWING OF COOK AREA(S)

FACTs project name: Vau	ıghn	Form # ML10
Date: January 28, 2011		
Reporting IH:	Caoimhín P. Connell, Forensi	c IH

See body of report

DRAWING OF STORAGE/DISPOSAL AREA(S)

FACTs project name: Vaughn Form # ML11			
Date: January 28, 2011			
Reporting IH:	Caoimhín P. Connell, Forensi	c IH	

See body of report

DRAWING OF GENERAL LAB AREA

FACTs project name: Vau	Form # ML12	
Date: January 28, 2011		
Reporting IH:	Caoimhín P. Connell, Forensi	c IH

See body of report



CERTIFICATION, VARIATIONS AND SIGNATURE SHEET

FACTs project name: Vau	ıghn	Form # ML14
Date: January 28, 2011		
Reporting IH:	Caoimhín P. Connell, Forensi	c IH

VARIATIONS:

No known material variations.

Certification

Statement	Signature
I do hereby certify that I conducted a preliminary assessment of the subject property in accordance with 6 CCR 1014-3, §4.	Called
I do hereby certify that the property has been decontaminated in accordance with the procedures set forth in 6 CCR 1014-3, § 5.	
I do hereby certify that I conducted post-decontamination clearance sampling in accordance with 6 CCR 1014-3, §6.	XXXXXXXXXXXX
I do hereby certify that the cleanup standards established by 6 CCR 1014-3, § 7 have been met as evidenced by testing I conducted.	
I do hereby certify that the analytical results reported here are faithfully reproduced.	Called

In the section below, describe any variations from the standard.

No known deviation of standard occurred.

I do hereby certify that I conducted a preliminary assessment of the subject property in accordance with 6 CCR 1014-3, § 4. I further certify that the cleanup standards established by 6 CCR 1014-3, § 7 have been met as evidenced by testing I conducted.

Signature

Date: January 28, 2011



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:	Vaughn	Form # ML15
Date January 28, 2011		
Reporting IH:	Caoimhín P. Connell, Forensic I	Н

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 260 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, US Air Force, 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 the Industrial Hygiene 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 condominia. Mr. Connell has conducted over 220 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.

APPENDIX B

ANALYTICAL REPORTS FOR FACTS SAMPLES

SAMPLING FIELD FORM

	The second secon			
FACTs project name: 部価	Form # ML17			
Date: January 18, 2011	Alcohol Lot#: A1ØØ1	A1ØØ1	Gauze Lot#: A1ØØ <i>(</i>	A1006
Reporting IH: Caoimhín P. Connell, Forensic IH	Preliminary X	Intermediate	Final	

		_											
Substrate	38 Ka4 meral	27 x20 gal. mon	Metal	Meral	5/2 ala								
Dim.	28 K24	27 120		49x11 MeTa	1450								
Func. Space													
Location	Spare - Ino or Dope Doning Wechanism	Attich imakion van Panonsication	ZX	FINACE INTORIOR	Arsing 40kg (50 Sine) electroised compuir								
Area/ Volume Weight											0.00 1,00		
Туре	3	3		(M									
Sample ID VMØ11811	-Ø	-02	-03	-04	-05	90-	-07	8Ø-	60-	-10			

Sample Types: W=Wipe; V=Microvacuum; A=Air; B=Bulk; L=liquid Surfaces; DW= Drywall, P=Painted; W= Wood, L= Laminated, V= Varnished, M= Metal, C=Ceramic, Pl=Plastic = 10% Data 6.54 or p = 10%under sampled

FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

Page of

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:	11105-07
Date Received:	January 20, 2011
Date Complete	d: January 24, 2011

January 24, 2011

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

CLIENT REF: Vaughn

SAMPLES: wipes/5

ANALYSIS: Methamphetamine by Gas Chromatography-Mass Spectrometry.

RESULTS: in total micrograms (ug)

Sample	Methamphetamine, ug	% Surrogate Recovery	
VM011811-01	7.28	95	
VM011811-02	7.26	98	
VM011811-03	< 0.030	95	
VM011811-04	6.21	97	
VM011811-05	1.88	98	
QA/QC Method Blank	< 0.004		
QC 0.100 ug Standard	0.105		
QA 0.020 ug Matrix Spike	0.019		
QA 0.020 ug Matrix Spike Duplicate	0.022		
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

CDL SAMPLING & CUSTODY FORM

□ ANALYTICAL CHEMISTRY INC.

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

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

of Page

No of 5 Broken Cooled ANALYSIS REQUESTED 9N MIN SELON 11/05-07 Normal Turn-around time COMMENTS Weigh and report in mg Not Submitted Total Number of Containers Ambient Use entire contents Methamphetamine Antact Yes verified by laboratory Please do not write in shaded areas Custody Seals: Lab File No. Temperature: RUSH SAMPLER Inspected By: Container: 9 8 4 N **Turnaround Time** 2 Days (1.75X) X Total µg 185 Bounty Hunters Lane, Bailey, CO 80421 X 24 Hours (2X) 3 Days (1.5X) 9 ANALYSIS REQUESTS 2 X Routine 4 Forensic Applications, Inc. 3 × × × × × × × Caoimhín P. Connell 2 × × × × × × × TIME 1500 1 118/2011 1600 × × × × × × × 303-903-7494 Other 120/11 DATE SAMPLE MATRIX REPORT TO: Vacuum COMPANY: ADDRESS: PHONE COMPANY FACTs, Inc. Wipe × × × × × × × CHAIN OF CUSTODY RECORD Signature SAMPLER NAME: Caoimhín P. Connell VMØ11811- Ø3 VMØ11811- Ø2 VMØ11811- Ø4 VMØ11811- Ø5 VMØ11811- Ø6 January 18, 2011 Fiosrach@aol.com VMØ11811-Ø1 VMØ11811- Ø7 Sample Number Vaughn Caoimhín P. Connell SAZON PROJECT Name/No: SAMPLING DATE: PRINT NAME eMail: LAB MIA V03 102 V04 105 101

APPENDIX C

COMPACT DIGITAL DISK (PHOTOGRAPHS AND ADDITIONAL DOCUMENTATION)