

#### FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

# Preliminary Assessment of an Identified Illegal Drug Laboratory

24018 Deer Valley Road Golden, Colorado

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#### **EXECUTIVE SUMMARY**

The West Metro Drug Task Force identified a methamphetamine laboratory at the property on December 28, 2005. In November of 2008, Forensic Applications Consulting Technologies, Inc. (FACTs) performed a State mandated Preliminary Assessment.

Based on the totality of the circumstances, FACTs makes the following observations:

- An illegal drug lab, as that term is defined in CRS §25-18.5-101, existed at the subject property from December 28, 2005 forward, and continues to exist at the time of this report.
- The property exhibits overt noncompliance with Colorado's methamphetamine cleanup standards.
- A Class 1 Public Nuisance, as defined in CRS §16-13-303(1) existed at the subject property from December 28, 2005 forward, and continues to exist at the time of this report.
- The property exhibits a significant sharps and biological hazard potential.
- WMDTF issued a letter of "Discovery" and "Notification" by virtue of its narrative (TF# 05-961; JCSO #05-47476) dated December 29, 2005.
- Repeated illegal entries were made into the property by the property owner's representatives, placing themselves in serious danger of chemical and physical injury, and placing a serious civil and criminal liability on the property owner.
- Wholesale decontamination activities (including trash-out) must be performed by a properly trained and qualified contractor pursuant to Colorado Regulation 6 CCR 1014-3.
- Following the decontamination activities, a qualified Industrial Hygienist must perform the post-decontamination process and issue a Decision Statement before reentry or occupancy may occur.

#### TIME LINE

On Wednesday, December 28, 2005, the West Metro Drug Task Force (WMDTF) performed a search at the property located at 24018 Deer Valley Road, in the "Village at Genesee" subdivision, (the subject property). During the search, the WMDTF identified an illegal drug laboratory as defined in CRS 25-18.5-101.

On January 23, 2007, the property was sign posted by Dr. Mark B. Johnson, M.D. Public Health Administrator for Jefferson County, Colorado. This posting confirmed the earlier prohibition and restriction of entry into the property.

On September 2, 2008, Forensic Applications Consulting Technologies, Inc. (FACTs) was contracted by Country Wide Services to perform a State mandatory Preliminary Assessment at the subject property as defined by Colorado State Board of Health Regulations.

On September 20, 2008, an unauthorized Arkansas company called Summitt (*sic*) Environmental<sup>1</sup> illegally entered the property and reportedly performed a "Preliminary Assessment." However, Summitt Environmental did not perform a Preliminary Assessment but rather performed unknown sampling methamphetamine, and produced a two page "report" (See Appendix A). The sampling and the confidence of the results of the sampling by Summitt were questionable and failed to meet any known sampling protocols.

On November 4, 2008, T&T Field Services<sup>2</sup> illegally entered the subject property to perform building maintenance activities. During their activities, T&T altered the condition of the plumbing in the property by pouring unknown materials into the plumbing fixtures. The material altered the composition and the appearance of the fixtures, and eliminated the ability of personnel from Forensic Applications Consulting Technologies, Inc. to subsequently assess extant plumbing conditions.

On November 5<sup>th</sup>, 2008, FACTs received notification of authorization to begin the work.

On November 14, 2008, pursuant to CRS §25-18.5-101, and Colorado Regulation 6 CCR 1013-4<sup>3</sup>, FACTs performed the site visit stage of the Preliminary Assessment. During this site visit, FACTs collected seventeen samples from the subject property interior. However, due to the abundant and overt visual indicators consistent with widespread and overt methamphetamine contamination, FACTs judiciously selected just four of the samples for analysis; archiving the remaining thirteen samples. The four samples confirmed widespread and overt methamphetamine contamination throughout the entire structure, including the attics, garage and all contents remaining in the property.

<sup>&</sup>lt;sup>3</sup> The Colorado State Board Of Health Regulations Pertaining to the Cleanup of Methamphetamine Laboratories, 6-CCR 1014-3 (§4)



<sup>&</sup>lt;sup>1</sup> 1225 E Gilliland, Texarkana, AR 71854

<sup>&</sup>lt;sup>2</sup> 3700 South Garrison St. Denver CO 80235.

#### REGULATORY REQUIREMENTS

#### Federal Requirements

All work associated with this Preliminary Assessment 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 Preliminary Assessment, and those findings, enter the public domain and are not subject to confidentiality.<sup>4</sup>

The Preliminary Assessment must be conducted according to specified requirements<sup>5</sup> 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 "Preliminary Assessment" pursuant to those regulations. Included with this discussion is a read-only digital disc (DVD). The disc contains mandatory information and photographs required by State regulation for a Preliminary Assessment. This Preliminary Assessment is not complete without the DVD and all associated support documents.

Pursuant to CRS §25-18.5-105, the subject property was deemed a "public health nuisance." Pursuant to CRS §16-13-303, the subject property and all of its contents was 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).

#### **Discovery and Notification**

Discovery and Notification occurred at the subject property by virtue of the Law Enforcement narrative (TF# 05-961; JCSO #05-47476) dated December 29, 2005.

#### **Preliminary Hypothesis**

During the Preliminary Assessment, the initial hypothesis is made that the subject area is clean and data will be collected to find support for this hypothesis. <u>Any</u> 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 <u>compels</u> the Industrial Hygienist to accept the null hypothesis



<sup>&</sup>lt;sup>4</sup> Section 8.26 of 6 CCR 1014-3

<sup>&</sup>lt;sup>5</sup> Section 4 of 6 CCR 1014-3

and declare the area non-compliant.<sup>6</sup> 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 <u>not</u> required during a Preliminary Assessment; 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:<sup>7</sup>

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, independent of any testing performed by FACTs, overt information existed from the following sources which confidently challenged the Primary Hypothesis:

- 1) Available law enforcement documentation
- 2) Visual Inspection of the property
- 3) Unauthorized sampling results

The sampling and analysis that was performed by FACTs confidently confirmed the presence of overt methamphetamine contamination at the subject property. The totality of the circumstances challenged the hypothesis that contamination was absent from all portions of the subject property. Based on the totality of circumstances, including objective sampling, we were not able to support the initial hypothesis and, therefore, we accept the null hypothesis and declare the primary residence, including the garage, and all of contents therein as non-compliant.

<sup>&</sup>lt;sup>7</sup> Section 4.6 of 6 CCR 1014-3



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<sup>&</sup>lt;sup>6</sup> This language and emphasis is verbatim from Appendix A (mandatory) of 6 CCR 1014-3

#### **Elements of the Preliminary Assessment**

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

| Mandatory<br>Final Documents<br>6-CCR 1014-3 | DOCUMENTATION   |        |  |  |  |
|--|---|--------|--|--|--|
| §8.1   | Property description field form                                   | Cando  |  |  |  |
| §8.2   | Description of manufacturing methods and chemicals                | Cando  |  |  |  |
| §8.3   | Law Enforcement documentation review discussion                   | Cando  |  |  |  |
| §8.4   | Description and Drawing of Storage area(s)                        | Carl   |  |  |  |
| §8.5   | Description and Drawing of Waste area(s)                          | Can    |  |  |  |
| §8.6   | Description and Drawing of Cook area(s)                           | Can    |  |  |  |
| §8.7   | Field Observations field form                                     | Carl   |  |  |  |
| 80.1   | FACTs Functional space inventory field form                       | Ca./   |  |  |  |
| §8.8   | Plumbing inspection field form                                    | 0/     |  |  |  |
| 80.0   | FACTs ISDS field form   | NA     |  |  |  |
| §8.9   | Contamination migration field form                                | Report |  |  |  |
| §8.10  | Identification of common ventilation systems                      | Carl   |  |  |  |
| §8.11  | Description of the sampling procedures and QA/QC                  | Cando  |  |  |  |
| §8.12  | Analytical Description and Laboratory QA/QC                       | Carl   |  |  |  |
| §8.13  | Location and results of initial sampling with drawings            | Cando  |  |  |  |
| §8.14  | FACTs health and safety procedures in accordance with OSHA        | Carl   |  |  |  |
| §8.15 -§8.19                                 | Not applicable  | NA     |  |  |  |
| §8.20  | FACTs Pre-remediation photographs and log                         | Ca     |  |  |  |
| 30.20  | FACTs Post-remediation photographs and log                        | NA     |  |  |  |
| §8.21  | FACTs SOQ   | Carl   |  |  |  |
| §8.22  | Certification of procedures, results, and variations              | Cando  |  |  |  |
| §8.23  | Mandatory Certification Language                                  | Carl   |  |  |  |
| §8.24  | Signature Sheet   | Carl   |  |  |  |
|  | Analytical Laboratory Reports                                     | 0/     |  |  |  |
|  | FACTs final closeout inventory document                           | NA     |  |  |  |
|  | Available Law Enforcement documents (confidential - by reference) | NA     |  |  |  |
|  | FACTs Field Sampling Forms  | Canto  |  |  |  |

Table 1
Inventory of Mandatory Elements and Documentation

#### **Subject Structure**

The primary residential structure was listed by the Jefferson County Assessor's Office as a 4,123 square foot dwelling built *circa* 1994, including an attached garage of 451 square feet. For the purposes of regulatory compliance, traditionally non-taxable spaces (such as an attic and crawlspace) must be included in the assessment. Therefore, for the purposes of this PA, the approximate total square feet of impacted floor space is listed as 5,123 square feet and sampling requirements must be based on this value.

#### **Adjoining Properties and Land**

A general layout of the structures in relationship to the roads is depicted in the drawing below; the subject property is depicted as yellow shading. Figure 1, below is not to scale.



Figure 1 General Site Overview

#### **Review of Law Enforcement Documentation**

As part of the Preliminary Assessment, FACTs is required by regulation<sup>8</sup> to review available law enforcement documents pertinent to a subject property. During this project, the West Metro Drug Task Force and Jefferson County Sheriff's Office exhibited the highest level of professionalism and cooperated with the requirements of our Preliminary Assessment. FACTs obtained copies of and reviewed the documents identified as Supplemental Report TF# 05-961; JCSO #05-47476, dated December 29, 2005.

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<sup>&</sup>lt;sup>8</sup> 6 CCR 1014-3 (Section 4.2)

#### County

#### Governing Body

Based on information provided to FACTs, the "Governing Body" as defined in CRS §25-18.5-101 for this subject property is:

Mr. Craig Sanders Environmental Protection Supervisor Jefferson County Department of Health and Environment 1801 19th Street Golden, CO 80401

#### Visual Inspection of the Property

Pursuant to State regulations, "Property" means anything that may be the subject of ownership or possession, including, but not limited to, land, buildings, structures, vehicles and personal belongings. Further, pursuant to Colorado Revised Statutes §25-18.5-101, the definition of a "drug laboratory" includes all proximate areas that are *likely* to be contaminated as a result of manufacturing, processing, cooking, disposing, or storing of methamphetamine, its precursors, waste products or equipment.

As part of our Preliminary Assessment, on Friday November 14, 2008, Mr. Caoimhín P. Connell, Forensic Industrial Hygienist performed a visual inspection of the subject property. Pursuant to regulatory requirements, the subject property was assigned into "functional spaces," and an indicia inventory and assessment was performed for each functional space.

The property was essentially in an "unoccupied" condition but contained residual chattels, furniture, major appliances and widespread debris left behind by the previous occupant(s).

To protect the property owner against the introduction of contaminants into the subject property, the Industrial Hygienist and his Technician donned fresh Tyvek suits and booties upon entering the property. All equipment brought into the subject property was staged at or near the front door of each structure entered. The ladder FACTs used during this assessment had been cleaned at a car wash prior to use.

sment.

<sup>&</sup>lt;sup>9</sup> The technician for this project was certified in methlab entry, through courses through the CRCPI for methlab first responder, and has approximately two years experience with methlab recognition and assessment.

#### Sample Collection

#### Wipe Samples

The samples collected throughout the subject property comprised of "discreet" sample. Discreet samples are a single wipe, collected from a single area, and submitted for analysis as a unique location.

Wipe samples were collected in a manner consistent with State regulations. The wipe sample medium was individually wrapped commercially available Johnson & Johnson<sup>TM</sup> 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.

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

Due to the nature of the data quality objectives, in light of the totality of information available for this subject property, field blanks were not required, and none were reported (however, one field blank was archived 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.

#### **Collection Rationale**

It is a common misconception that the Industrial Hygienist is required to collect samples during a Preliminary Assessment of an illegal drug lab. 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  $\mu$ g/100 cm2), the samples necessarily indicate that the area is not contaminated and no action is required. However, the regulatory threshold values are <u>exclusively</u> to be used as *prima fascia* evidence during <u>final verification</u> activities in the absence of all other information. During a 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, we collected surface wipe samples from the subject property under the presumed possibility that the property was compliant, and the samples could be used to issue a Decision Statement

The data quality objectives of the samples collected during the Preliminary Assessment were to determine, within the context of the regulation, whether or not compliant conditions existed at the property.

During the visual inspection, based on the totality of the circumstances, including the identification of three methamphetamine pipes, and approximately 14 pieces of aluminum foil used to heat methamphetamine and/or heroin, there was ample evidence to indicate very little possibility that the residual methamphetamine in the house was below compliant levels.

Therefore, in an effort to control costs, FACTs chose to analyze just four samples which would speak directly to the question of widespread distribution:

- 1) South Attic
- 2) Master Bedroom Ceiling Fan
- 3) Living Room Ceiling Fan
- 4) Furnace Interior

#### Sample Results

The results of the samples are summarized in the table below.

| Sample ID     | Location                       | Result<br>µg/100cm2 |
|---------------|--------------------------------|---------------------|
| DVRM111408-03 | Living room ceiling fan        | 10.89               |
| DVRM111408-11 | Master bedroom ceiling fan     | 64.58               |
| DVRM111408-13 | Attic galvanized exhaust stack | 2.41                |
| DVRM111408-17 | Furnace interior return duct   | 16.05               |

Table 1
Results of Preliminary Wipe Samples

Overall, the samples indicate widespread, significantly elevated methamphetamine contamination throughout the entire residential structure including the garage, and all items within the structure. Therefore, the remaining samples provide no utility and could only be used to confirm widespread contamination; therefore, these samples were archived.

Table 2, below, presents an inventory of the wipe samples which FACTs archived. FACTs has given the Property Owner an opportunity to claim the samples and will maintain the archived samples until January 31<sup>st</sup>, 2009, before discarding the samples.

| Sample ID     | Sample Location                |  |  |  |
|---------------|--------------------------------|--|--|--|
| DVRM111408-01 | Foyer top of door bell         |  |  |  |
| DVRM111408-02 | Study top of Work Light        |  |  |  |
| DVRM111408-04 | DS Toilet room top of light    |  |  |  |
| DVRM111408-05 | Field Blank                    |  |  |  |
| DVRM111408-06 | Laundry Closet W Wall S Corner |  |  |  |
| DVRM111408-07 | Garage top of light fixture    |  |  |  |
| DVRM111408-08 | US SE Bedroom SE Corner S Wall |  |  |  |
| DVRM111408-09 | US SW Bedroom Top of Dresser   |  |  |  |
| DVRM111408-10 | US W Bedroom TV Stand          |  |  |  |
| DVRM111408-12 | US Bath top of light fixture   |  |  |  |
| DVRM111408-14 | Under stairs E Wall            |  |  |  |
| DVRM111408-15 | DS Bath West Wall N side       |  |  |  |
| DVRM111408-16 | Bar Area TV Cabinet shelf      |  |  |  |
| DVRM111408-17 | Furnace Room Duct Return       |  |  |  |
| DVRM111408-18 | DS Bedroom Closet Shelf        |  |  |  |

Table 2 Inventory of Preliminary Wipe Samples

#### **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.

#### **Data Set**

MDL was 0.004  $\mu$ g; LOQ was 0.03  $\mu$ g; MBX <MDL; LCS 2.0  $\mu$ g (RPD 4%, recovery =104%); Matrix spike 0.020  $\mu$ g (RPD 10%; recovery 110%); Matrix spike Dup 0.020  $\mu$ g; (RPD 10%; recovery 110%); Surrogate recovery: High 127% (Sample 17), Low 92% (Samples 3 and 13); FACTs reagents: MeOH lot #A0801 <MDL for n=1; Gauze lot G0805 <MDL for n=1. The QA/QC indicate the data met the data quality objectives; and the results appear to exhibit positive bias.

#### **Sample Locations**

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.

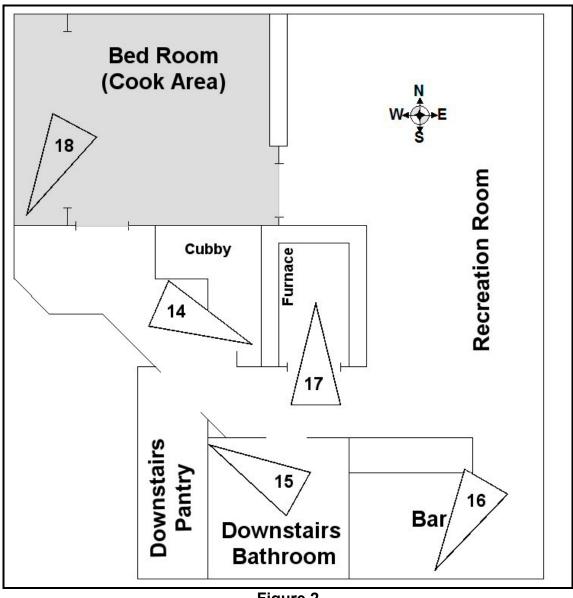


Figure 2
Sample Locations Basement- Not to Scale

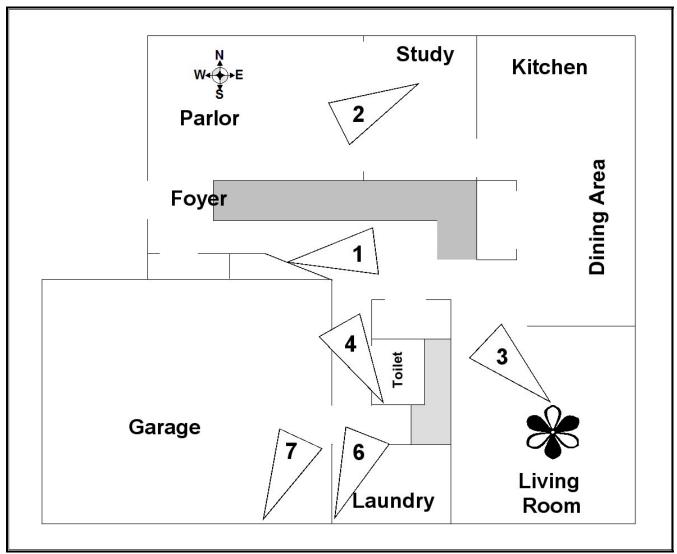


Figure 3 Main Floor - Not to Scale

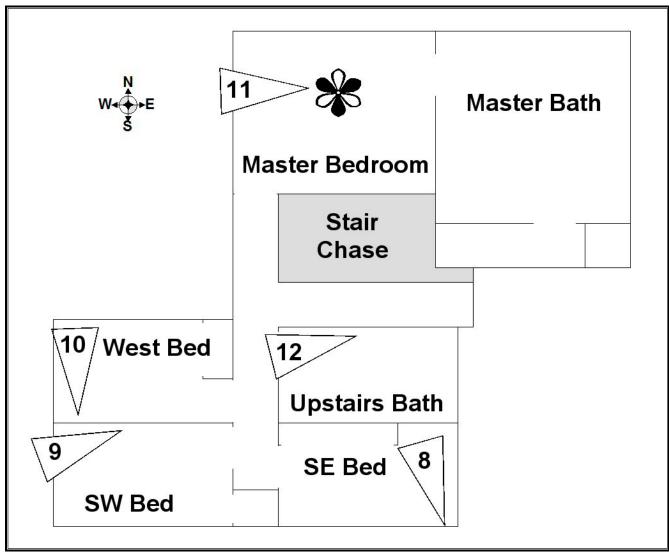


Figure 4
Upstairs Level- Not to Scale

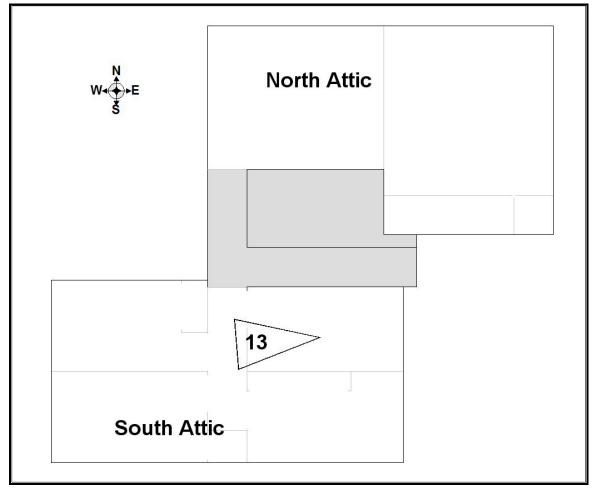


Figure 5
Attic Level - Not to Scale

#### Identification of Cook/Storage Areas

Based on the law enforcement documents, and our observations, a Red-Phosphorous cook was located in the closet of the Basement Bedroom. Based on the law enforcement documents, a potential Red-P cook was also located in the Bar area, also in the basement.

#### **Identification of Contamination Migration**

Air within a structure communicates, to some extent, with all other areas within that structure. Airborne contaminants therefore, similarly, have the potential for migration, following the paths of air movement. Walls and floors may either act as partial barriers or enhance migration by acting as migration conduits. Air migration patterns within a structure is extremely complex and difficult to quantify with certainty.

AGTa In

<sup>&</sup>lt;sup>10</sup> Rasmuson J, Hall D, Birkner AZ; Connell CP, Martyny J., A Computational Fluid Dynamics (CFD) and Tracer Gas Comparison of the Spatial Distribution of an Airborne Contaminant in an Office Space as a Function of General Ventilation Conditions, American Industrial Hygiene Assoc. Philadelphia (2007)

#### **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 building is divided into such areas based solely on subjective professional judgment with foundational guidance in Federal Regulation. <sup>11</sup>

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:

| Functional Space | Describe the functional space                               |  |  |  |
|------------------|---|--|--|--|
| Number           | (See drawings for delineating structural features)          |  |  |  |
| 1                | Foyer, foyer hall and stairway up to bedrooms               |  |  |  |
| 2                | Parlor and Study  |  |  |  |
| 3                | Kitchen, Dining Room and Living Room                        |  |  |  |
| 4                | Downstairs Toilet Room                                      |  |  |  |
| 5                | Laundry Room and Laundry Hall Closet                        |  |  |  |
| 6                | Garage  |  |  |  |
| 7                | Upstairs Southeast Bedroom                                  |  |  |  |
| 8                | Upstairs Southwest Bedroom                                  |  |  |  |
| 9                | Upstairs West Bedroom                                       |  |  |  |
| 10               | Stairs up, Balcony, Hallway and Bathroom                    |  |  |  |
| 11               | Master Bedroom  |  |  |  |
| 12               | Master Bathroom   |  |  |  |
| 13               | Basement Stairs, basement hall, Cubby and Downstairs Pantry |  |  |  |
| 14               | Downstairs Bathroom   |  |  |  |
| 15               | Downstairs Bar and Recreational Room                        |  |  |  |
| 16               | Downstairs Bedroom  |  |  |  |
| 17               | North Attic   |  |  |  |
| 18               | South Attic   |  |  |  |
| 19               | Furnace Interior  |  |  |  |

Table 3 Functional Space Inventory

During our visit, much of the original chattels had been illegally removed from the property. FACTs is not aware of where the contaminated materials were relocated.

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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#### Structure Number 1- Residence

#### Functional Space 1: Foyer and Entrance Areas

This space included the entrance hallway, and the hallway leading into the main living room. The area contained several conclusive indicators. The smoke detector had been disabled in this space.

#### **Functional Space 2: Parlor and Study**

This space is the open area to the north as one enters the residence. The combined space included drug paraphernalia (a meth pipe, "jail art," heroin heating spoon), and other drug use indicators. The smoke detector had been disabled in this space.

#### Functional Space 3: Kitchen, Dining Room and Living Room

This open functional space was included due to the open plan of the residence. The space included drug paraphernalia (syringes), evidence of burns, jail "art," and other conclusive indicators. The smoke detector had been disabled in this space. The wipe sample collected from this area (from the ceiling fan in the Living Room), conclusively demonstrated the presence of elevated and widespread concentrations of methamphetamine in this functional space (the ceiling fan blade contained  $11~\mu g$  methamphetamine per 100~square~centimeters).

#### Functional Space 4: Downstairs Toilet Room

This space was defined as that term is commonly known. Due to the squalor and small size of the room, we were not able to perform an in depth assessment of all contents. However, we anticipate used syringes and used condoms to be present and numerous in the debris.

#### **Functional Space 5: Laundry and Laundry Closet**

The appliances had been illegally removed from the property at the time of our visit. This function space contained very little debris, (relative to the rest of the property), and no visual conclusive indicators.

#### Functional Space 6: Garage

The garage is used here as that term is commonly known. Access into the garage was greatly restricted due to the profound quantity of trash, chattels and other objects. We did identify equipment consistent with methamphetamine manufacturing (hot plate), biological hazards (used condoms) and sharps hazards (syringes).

#### Functional Space 7: Upstairs Southeast Bedroom

This functional space contained considerable amount of debris and other items, making a thorough assessment of all contents impossible. The room did contain non-conclusive "artistic expressions."

#### **Functional Space 8: Upstairs Southwest Bedroom**

This space is delineated by the walls surrounding the room. This room contains the attic access for the south attic. This functional space contained several conclusive visual indicators consistent with controlled substance use/abuse, including, several metal foil planchettes<sup>12</sup> used for heating methamphetamine and/or heroin. This space also contained numerous used condoms.

#### **Functional Space 9: Upstairs Central West Bedroom**

This space is a small bedroom on the central west side of the residence. The smoke detector had been disabled in this space. We observed a small amber vial of an unknown liquid on the floor of the space; the liquid could be controlled substance or an unidentified inhalant, as referenced in the WMDTF narrative.

#### Functional Space 10: Upstairs Hall and Upstairs Bathroom

This functional space is the main bedroom hallway and the bathroom from the hallway. The smoke detector had been disabled in this space. This space did not contain any other notable conclusive visual indicators.

#### **Functional Space 11: Master Bedroom**

This space is defined as that term is commonly known. This functional space contained several visual indicators consistent with clandestine drug laboratories and controlled substance use/abuse, including unexplainable electrical wiring, "artistic expressions," methamphetamine (Ceiling fan sample contained 65  $\mu$ g/100 cm2); and drug paraphernalia.

#### **Functional Space 12: Master Bathroom**

This space is defined as that term is commonly known. This functional space contained several visual indicators consistent with clandestine drug laboratories and controlled substance use/abuse, including a shotgun blast in the east wall, a meth pipe, and foil heating planchettes. The north attic is accessed from this functional space.

### Functional Space 13: Basement Stairs, Basement Hallway, Cubby, and Basement Pantry

This functional space contained several conclusive visual indicators consistent with clandestine drug laboratories or controlled substance use/abuse. The indicators included pornography, a meth pipe, and foil planchettes. Also in this area were used condoms.

#### **Functional Space 14: Downstairs Bathroom**

This space is defined as that term is commonly known. This functional space contained several visual indicators consistent with clandestine drug laboratories, and controlled substance use/abuse, including unusual sex toys, and yellow staining.

AGTa Inc

<sup>&</sup>lt;sup>12</sup> Any container or flat object onto which controlled substances are placed on the top surface, and heat is applied to the underside – for the purpose of aerosolizing the controlled substance

#### Functional Space 15: Downstairs Bar and Recreational Room

This large functional space incorporates the bar, and the two areas along the east and north side of the basement; collectively called the "recreational Room." This functional space exhibited structural damage for unknown reasons. The space contained several conclusive indicators for methamphetamine and/or heroin including foil planchettes, porn, artistic expressions, syringes, and used condoms.

#### **Functional Space 16: Downstairs Bedroom**

This functional space is the primary cook area identified by law enforcement. During our assessment, we observed several indicators including yellow and red staining, ammunition, syringes and porn.

#### **Functional Space 17: North Attic**

The structure appears to have two attics, roughly one on the north half and one on the south half. Although we accessed the south attic, we did not realize the potential for a split attic until we reviewed the photographs, and we did not enter the north attic.

Therefore, it is possible that unknown hazards, including equipment and chemicals are present in this space. During remediation, the contractor should enter the space with extreme caution, and upon visual identification of any unusual observations, the contractor should immediately retreat and contact FACTs.

#### **Functional Space 18: South Attic**

The south attic is accessed through the Upstairs Southwest bedroom. Our visual inspection indicated that although the access panel was removed, activity in the attic was not notable. We collected a wipe sample from the vertical galvanized exhaust stack deep within the attic. The methamphetamine concentration of the wipe sample,  $(2 \mu g/100 \text{ cm}2)$  indicates that the contamination in the occupied space was so elevated as to have migrated into the attic space resulting in elevated concentrations. The attic space for this property is such that it is reasonable to presume that future occupants will use the attic for storage.

#### **Functional Space 19: Furnace**

Although arguably not a functional space *per se*, the sample collected from an interior duct of the ventilation system indicated that methamphetamine contamination in that system was significantly elevated  $(16 \mu g/100 \text{ cm}2)$ . <sup>13</sup>

The industrial hygiene and medical communities now know that the mere use of methamphetamine in a home results in elevated exposures to the occupants via airborne migration. When methamphetamine is smoked, between 80%<sup>14</sup> and half<sup>15</sup> of the

<sup>&</sup>lt;sup>14</sup> Cook CE, *Pyrolytic Characteristics, Pharmacokinetics, and Bioavailability of Smoked Heroin, Cocaine, Phencyclidine, and Methamphetamine* (From: Methamphetamine Abuse: Epidemiologic Issues and Implications



<sup>&</sup>lt;sup>13</sup> The sample result reported here has been corrected for a 75% recovery of material harvested from the surface of the duct interior.

substance is released from the user's pipe. Of that material which is inhaled, between  $33\%^{16}$  and  $10\%^{17}$  of the nominal dose is not absorbed into the body (leaving the remainder airborne). Recent work conducted by Industrial Hygienists at the National Jewish Hospital in Denver, Colorado, indicate that a single use of methamphetamine, by smoking, would 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.<sup>19</sup>

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

The results of the furnace sample alone would lead a reasonable person, trained in aspects of meth laboratories, to conclude the *presence* of widespread elevated methamphetamine throughout the entire occupied space, <u>all other sample results notwithstanding.</u>

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

<sup>&</sup>lt;sup>19</sup> 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.)



<sup>&</sup>lt;sup>15</sup> 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.)

<sup>&</sup>lt;sup>17</sup> 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

<sup>&</sup>lt;sup>18</sup> 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.)

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 items of debris and personal belongings; even in areas that have not been confirmed as contaminated by sampling. Having said this, the remaining samples objectively confirm the existence of widespread contamination.

#### **EXTERIOR GROUNDS**

Although not truly a functional space *per se*, the exterior grounds were assessed independently. During the summer months, stressed vegetation indicating illegal dumping is more readily observable. In this case, the winter cycle of growth had already set in, making observations less reliable. Nevertheless, within the limitations of a visual inspection, we did not observe any stressed vegetation or other indicators that would suggest the exterior grounds were adversely affected by controlled substance activities in the residence.

#### SEWERAGE SYSTEM

The Jefferson County Assessor's Office indicates the property is on city water and city sewer. Therefore, no inspection of an exterior sewer system, septic tank or leach field was made.

#### 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 presence exists throughout the residential structure of the subject property.

Based on our observations, the entire residence, including the garage and all contents in the entire superstructure must be subjected to thorough remediation consistent with the regulatory requirements.

Based on our experience, it may be impossible to economically decontaminate the furnace and associated ductwork, and the system may have to be removed and replaced. We have included alternative options in the accompanying scope of work.

The property presents unusual hazards for the decontamination contractor including sharps and blood borne pathogens. Accordingly, the contractor should have mandatory OSHA compliance programs in place for these hazards.

#### **RECOMMENDATIONS**

Based on our observations, and laboratory results, we recommend standard industry practices for decontamination to 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.

#### **Universal Site Requirements**

- 1. The contractor should have a blood borne pathogens program in place pursuant to the requirements of Title 29 CFR 1910.1030.
- 2. The contractor shall establish and maintain a sharps injury log for the recording of percutaneous injuries from contaminated sharps. The information in the sharps injury log shall be recorded and maintained in such manner as to protect the confidentiality of the injured employee. The sharps injury log shall contain, at a minimum: A) The type and brand of device involved in the incident, B) The work area where the exposure incident occurred, and C) an explanation of how the incident occurred. The requirement to establish and maintain a sharps injury log shall apply regardless of any other mandatory compliance issues 29 CFR 1904.
- 3. 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).
- 4. The on-site container shall be secured with a padlock at all times when not immediately manned by remediation personnel.
- 5. 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*.
- 6. We recommend the decontamination process be conducted in Level C PPE ensembles with a minimum of half-face APRs or PAPRs. Employees should be prohibited from handling debris by hand without appropriate sharps gloves.
- 7. We recommend that a decontamination corridor with showers be established initially at the front door and then inside the garage.
- 8. All remediation work performed at the residence should be conducted under written contract with a reputable remediation company qualified to perform the work.
- 9. All work performed at the residence should be conducted with open communication and cooperation with the West Metro Drug Task Force, the Jefferson County Sheriff's Office, and the Jefferson County Department of Health and Environment.

- 10. Any evidence of child pornography shall be immediately reported to the Jefferson County Sheriff's Office.
- 11. Discovery of any controlled substances shall be immediately reported to the Jefferson County Sheriff's Office.
- 12. All remediation work should be presumed to be pursuant to Title 29 of the Code of Federal Regulations, §1910.120 until otherwise indicated.
- 13. 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.
- 14. The contractor *should* be contractually obligated to include the personnel air monitoring data in their final documentation.
- 15. 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.
- 16. Contractors should be contractually obligated to cover industrial hygiene costs of return visits and sample expenses as a result of a failed final clearance.
- 17. State regulations prohibit painting or otherwise encapsulating surfaces prior to final clearance sampling by the Industrial Hygienist.
- 18. 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.
- 19. 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.
- 20. Once the contractor's samples indicate the contamination has been sufficiently reduced, the Industrial Hygienist should perform final clearance sampling according to 6-CCR 1014-3.

#### Decontamination of The Residence

Due to the elevated concentrations associated with the property, the ceilings must be addressed. Currently, the State of Colorado prohibits encapsulation, and there is no waiver mechanism in place to obtain variances.

Any and all disturbance of asbestos containing materials (ACMs or PACMs) in the subject property must be in accordance with State and Federal Regulations.

The contractor may propose removal of the furnace and associated ductwork, *in* toto, or may propose cleaning, and decontamination of the ventilation system.

The following decontamination process should take place in this order: (any asbestos abatement not withstanding):

- 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 ground level 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 front door. Ultimately, it would be advisable that the garage be trashed-out as quickly as possible to permit relocation of the decon/bag-out/loadout in the garage.
- 7. Carefully bag and remove all clothing, debris and other items from the property. If the contractor discovers items of notable value, that can be economically salvaged (such as coin collections, jewelry, statuary, high quality electronics), the contractor shall notify the registered property owner for guidance. Otherwise, all chattels in the residence and garage are scheduled to be discarded without decontamination.
- 8. Window coverings (window blinds) should be discarded.
- 9. All large household appliances (dishwasher, etc) shall be wiped down and salvaged.



- 10. Once all items are bagged and/or wrapped, the items can be transported through the airlock and transloaded to the bag-out. At the bag-out, the exterior surfaces of the bags and wrapping should wiped down, and the bags and items may be discarded.
- 11. All bathroom exhaust fans shall be removed and discarded.
- 12. The entire contents of the attics, including all insulation shall be removed and discarded. All surfaces in the attics shall be wiped down in a normal fashion.
- 13. Carpeting and associated padding should be removed and discarded. However, the contractor is encouraged to provide a proposal for steam-cleaning the carpet, and allowing the carpet to remain. If the carpet remains, it will be subjected to final clearance sampling in accordance with standard industrial hygiene microvacuum sampling procedures.<sup>20</sup>
  - a. The interpretation of the results of the vacuum samples takes into account the surface area sampled, and the mass of material removed from that surface. The laboratory will be instructed to weigh and report the mass of debris recovered from the cassette, along with the total mass of methamphetamine in that debris. From this information, FACTs will calculate and report a "density" of methamphetamine. The "density" used here is expressed in units of micrograms of methamphetamine recovered per milligram of removable material, per unit area of surface (µg/mg/cm2) and is designated with the Greek letter rho ( $\rho$ ). There are no regulatory guidelines by which we may compare densities; the interpretation of the data is exclusively within the realm of professional judgment of the Industrial Hygienist. In our opinion, based on our database of samples from previous methamphetamine contaminated properties, FACTs has set a qualified density "threshold of concern" of 0.5 p. That is, if the methamphetamine density in the carpet exceeds 0.5 p, FACTs will make the unqualified statement that in the absence of conflicting information, the material requires further decontamination. The value of "0.5" in this case, has no association with the State mandated decision threshold of 0.5 μg/100cm2 – the resemblance of the two values is purely coincidental.
- 14. Following the removal of interior contents, <u>all</u> surfaces in the entire interior space (including the attic), 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), exterior fireplaces, and every other interior surface whether specifically mentioned or not, shall be thoroughly wiped down to remove residual contamination.

Enclosures: One CD; Data package, and Appendices

<sup>&</sup>lt;sup>20</sup> For example, see ASTM Method D 5756-02



#### **APPENDICES**

#### **SUPPORTING DOCUMENTS**

#### **APPENDIX A**

**SUMMITT ENVIRONMENTAL SAMPLING "REPORT"** 

ET ENVIRONMENTAL, INC.

# Chain of Custody

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Cooler/Sample Secure? Tes DNo Tracking or Shipping Number: Samples Received on Ice? DYes Mo. Method of Shipment: DPS DBus Fred-Ex DLone Star DHand Delivered Airborne DOther:

□ 24 Hours □ 2-8 Hours

Coutine

Requested Turnaround Time: 45 Working Days D 2 Working Days



## HAZTEC, INC Hazards Testing Evaluation and Consulting, Inc.

Norman Kemper PO Box 697 Cabot, Arkansas 72023 Ph: 501-941-3086 Cell: 501-554-5554

Analysis Report

Haztec Project # 08-00013

10/13/2008

Sample#

Result

08-00013-1 (Kitchen)

08-00013-2 (Living Room)

08-00013-3 (Den Wall) 08-00013-4 (Wet Bar wall above sink)

08-00013-5 (Lower level bathroom)

08-00013-6 (Family Room) 08-00013-7 (Lower level Bed Room)

08-00013-8 (Master Bath Room) 08-00013-9 (Black Room)

08-00013-10(Garage)

Methamphetamine - 0.273 ug/100cm<sup>2</sup>
Methamphetamine - 0.186 ug/100cm<sup>2</sup>

Methamphetamine - 0.066 ug/100cm<sup>2</sup>
Methamphetamine - 0.023 ug/100cm<sup>2</sup>
Methamphetamine - 0.246 ug/100cm<sup>2</sup>

Methamphetamine - 0.025 ug/100cm<sup>2</sup>
Methamphetamine - 0.043 ug/100cm<sup>2</sup>
Methamphetamine - 0.038 ug/100cm<sup>2</sup>

Methamphetamine - 0.041 ug/100cm<sup>2</sup>
Methamphetamine - 0.025 ug/100cm<sup>2</sup>

Morman Temper

#### **APPENDIX B**

#### FIELD FORMS

| Form    | DOCUMENT  |
|---------|---|
| ML1     | FACTs Property description field form                           |
| ML2     | Plumbing inspection field form (plumbing system integrity and   |
| IVILZ   | identification of sewage disposal mechanism)                    |
| ML2     | Ventilation inspection  |
| ML3     | FACTs Functional space inventory field form                     |
| ML4     | FACTs Law Enforcement documentation field form                  |
| ML5     | FACTs Field observations field forms                            |
| ML6     | FACTs Contamination migration field form                        |
| ML8     | FACTs Pre-remediation photograph log sheet field form           |
| ML14    | FACTs Certification of procedures, results, and variations from |
| IVIL 14 | standard practices. (Signature page)                            |
| ML15    | FACTs SOQs  |
| ML 17   | FACTs Field Data Sheets   |



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

| FACTs project name: DVI | Form # ML1                       |  |  |  |  |
|-------------------------|----------------------------------|--|--|--|--|
| Date: November 14, 2008 |                                  |  |  |  |  |
| Reporting IH:           | Caoimhín P. Connell, Forensic IH |  |  |  |  |

#### **PROPERTY DESCRIPTION:**

| PROPERTY DESCRIPTION                       | JN.  |             |                         |  |  |  |  |  |
|--|--|-------------|-------------------------|--|--|--|--|--|
| Physical address                           | 24018 Deer Valley Rd<br>Golden CO 80401-5763   |             |                         |  |  |  |  |  |
| Legal description or VIN                   | Village Genesee Sur. No. 1 Schedule: 409532, Parcel ID: 40-183-03-111 Neighborhood: 8018 - VILLAGE AT GENESEE Subdivision Name: 780650, Lot OS77, Section 18, Township 4, Range 70, Quarter Section W2 |             |                         |  |  |  |  |  |
| Registered Property Owner                  | Bank Of New York Certificateholders CWARS Inc  |             |                         |  |  |  |  |  |
| Number of structures                       | One  |             |                         |  |  |  |  |  |
| Type of Structures                         | 1: Residential structure 2:  | 5,123       | Square feet Square feet |  |  |  |  |  |
| (Each affected structure will need a       | 3:<br>4:   |             | Square feet             |  |  |  |  |  |
| "Functional Space"                         |  |             | Square feet             |  |  |  |  |  |
| inventory)                                 | 5:   |             | Square feet             |  |  |  |  |  |
|  | 6:   |             | Square feet             |  |  |  |  |  |
| Adjacent and/<br>or surrounding properties | 1: North: Single family residential 2: South: Single family residential 3: East: Single family residential 4: West: Single family residential 5: 6:  |             |                         |  |  |  |  |  |
| General Property<br>Observations           | Dilapidated structure with damage to walls; general contamination, biohazard   | filth and s | qualor, heavy           |  |  |  |  |  |
| Presumed Production<br>Method              | Red-P Production with heavy use  |             |                         |  |  |  |  |  |

#### **PLUMBING INSPECTION AND INVENTORY**

| FACTs project name: DVI | Form # ML2                                   |  |  |  |  |  |
|-------------------------|--|--|--|--|--|--|
| Date: November 14, 2008 |  |  |  |  |  |  |
| Reporting IH:           | oorting IH: Caoimhín P. Connell, Forensic IH |  |  |  |  |  |

| Functional | Room            | Fixture         | Indicia? | Comments  |
|------------|-----------------|-----------------|----------|-----------|
| Space      |                 |                 |          |           |
| 4          | Toilet Room # 1 | Toilet          | N        |           |
| 4          | Toilet Room # 1 | Sink            | N        |           |
| 10         | Bathroom # 1    | Bath            | Υ        | Staining  |
| 10         | Bathroom # 1    | Shower          | Υ        | Staining  |
| 10         | Bathroom # 1    | Sink 1          | Υ        | Corrosion |
| 10         | Bathroom # 1    | Sink 2          | Υ        | Staining  |
| 10         | Bathroom # 1    | Toilet          | N        |           |
| 12         | Bathroom # 2    | Bath            | N        |           |
| 12         | Bathroom # 2    | Shower          | Υ        | Staining  |
| 12         | Bathroom # 2    | Sink 1          | Υ        | Corrosion |
| 12         | Bathroom # 2    | Sink 2          | N        |           |
| 12         | Bathroom # 2    | Toilet          | N        |           |
| 14         | Bathroom # 2    | Bath            | Υ        | Staining  |
| 14         | Bathroom # 2    | Shower          | NA       |           |
| 14         | Bathroom # 2    | Sink            | N        |           |
| 14         | Bathroom # 2    | Toilet          | N        |           |
| 15         | Bar             | Sink            | N        |           |
| 3          | Kitchen         | Sink            | Υ        | Staining  |
| 5          | Laundry         | Slop sink       | Y        | Staining  |
| 5          | Laundry         | Washing machine | NA       | Missing   |
| 3          | Kitchen         | Dishwasher      | N        |           |

#### **VENTILATION INSPECTION AND INVENTORY**

| Item                                      | Y/N | Indicia<br>? | Sampled ? | Comments          |
|---|-----|--------------|-----------|-------------------|
| Isolated AHU?                             | Υ   | Υ            | Υ         | xxxxxxxx          |
| Common air intake?                        | N   |              |           |                   |
| Common bathroom exhausts?                 | N   |              |           |                   |
| Forced air system?                        | Υ   |              |           |                   |
| Steam heat?                               | N   |              |           |                   |
| Common ducts to other properties?         | N   | NA           |           | xxxxxxxxxx        |
| Passive plena to other properties?        | N   |              |           |                   |
| Active returns to other properties?       | N   |              |           |                   |
| Passive wall grilles to other properties? | N   |              |           |                   |
| Industrial ventilation?                   | N   |              |           |                   |
| Residential ventilation?                  | Υ   | Y            | Υ         | xxxxxxxxxxxxxxxxx |
| Pressurized structure?                    | N   | NA           |           | xxxxxxxxxxxxxx    |

#### **FUNCTIONAL SPACE INVENTORY**

| FACTs project name: DVI | RM                           | Form # ML3 |  |
|-------------------------|------------------------------|------------|--|
| Date: November 14, 2008 |                              |            |  |
| Reporting IH:           | Caoimhín P. Connell, Forensi | c IH       |  |

| Structure<br>Number | Functional<br>Space<br>Number | Indicia<br>(Y/N) | Describe the functional space (See drawings for delineating structural features ) |
|---------------------|-------------------------------|------------------|---|
| 1                   | 1                             | Υ                | Foyer, foyer hall and stairway up to bedrooms                                     |
| 1                   | 2                             | Υ                | Parlor and Study  |
| 1                   | 3                             | Υ                | Kitchen, Dining Room and Living Room  |
| 1                   | 4                             | Υ                | Downstairs Toilet Room  |
| 1                   | 5                             | Υ                | Laundry Room and Laundry Hall Closet  |
| 1                   | 6                             | Υ                | Garage  |
| 1                   | 7                             | Υ                | Upstairs Southeast Bedroom  |
| 1                   | 8                             | Υ                | Upstairs Southwest Bedroom  |
| 1                   | 9                             | Υ                | Upstairs West Bedroom   |
| 1                   | 10                            | Υ                | Stairs up, Balcony, Hallway and Bathroom  |
| 1                   | 11                            | Υ                | Master Bedroom  |
| 1                   | 12                            | Υ                | Master Bathroom   |
| 1                   | 13                            | Υ                | Basement Stairs, basement hall, Cubby and Downstairs Pantry                       |
| 1                   | 14                            | Υ                | Downstairs Bathroom   |
| 1                   | 15                            | Υ                | Downstairs Bar and Recreational Room  |
| 1                   | 16                            | Υ                | Downstairs Bedroom  |
| 1                   | 17                            | Υ                | North Attic   |
| 1                   | 18                            | Υ                | South Attic   |
| 1                   | 19                            | Υ                | Furnace Interior  |

#### **LAW ENFORCEMENT DOCUMENTATION**

| FACTs project name: DVI | RM                               | Form # ML4 |  |  |
|-------------------------|----------------------------------|------------|--|--|
| Date: November 14, 2008 |                                  |            |  |  |
| Reporting IH:           | Caoimhín P. Connell, Forensic IH |            |  |  |

| Inventory of Reviewed Documents                            | 1: JCSO Call history from 11/1/05 to 11/7/08 2: JCSO #05-47476 Supplemental 12-29-05 3: TF# 05-961 Supplemental 12-29-05 4: 5: |                  |  |
|--|--|------------------|--|
| Described method(s) of production                          | Red-P and pseudoephedrine pill pull  |                  |  |
|  | Pseudoephedrine pill pull  | Basement bedroom |  |
|  | Andrix 605   | Basement bedroom |  |
|  | Red P  | Basement bedroom |  |
|  | Corning vision ware  | Basement bedroom |  |
|  | Coleman fuel   | Bar              |  |
| Chemicals identified by the LEA                            | Hydrochloric acid  | Bar              |  |
| as being present   | Coffee filters   | Bar              |  |
|  | Oxycodone  | Driveway         |  |
|  | Inhalant   | Driveway         |  |
|  | Methamphetamine  | Not specified    |  |
|  | Ephedrine in Mountain Dew bottle   | Not specified    |  |
|  | Acid in clear bottle red lid   | Not specified    |  |
| Cooking areas identified                                   | Downstairs basement bedroom  |                  |  |
| Chemical storage areas identified                          | See above  |                  |  |
| LE Observation on areas of contamination or waste disposal | None   |                  |  |



FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

November 7, 2008

Jefferson County Sheriff's Office Records Division 200 Jefferson County Parkway Golden, CO 80401

To Whom It May Concern:

Forensic Applications, Inc. has been contracted to perform a "Preliminary Assessment" of 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:

# 24018 Deer Valley Road, Evergreen, Colorado

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.

Prior to our site visit, we would like to obtain at least a call history for the property, going back for the last 36 months or meet with one or more JCSO members who may be familiar with the property. If there are narratives involving controlled substances or HazMat callouts, we would like to review those documents as well. We are only interested in issues involving controlled substances or hazardous materials responses. If no such records are available please let us know and we will merely make that notation in our report to the JeffCo Department of Health.

We will be performing the on-site assessment on November 13, 2008, and will need to review 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 <a href="mailto:any">any</a> information considered sensitive by an investigating agency. We have developed a close working relationship with Law Enforcement personnel across the State of Colorado, and we value and respect that open line of communication. Our SOQ, as required by regulation, is available on-line at: <a href="http://www.forensic-applications.com/meth/coloregs.html">http://www.forensic-applications.com/meth/coloregs.html</a>.

Sincerely,

Caoimhín P. Connell

Forensic Industrial Hygienist



FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

November 14, 2008

West Metro Drug Task Force PO Box 16053 Golden CO, 80402

To Whom It May Concern:

Forensic Applications, Inc. has been contracted to perform a "Preliminary Assessment" of 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 the WMTF area at:

# 24018 Deer Valley Road, Evergreen, Colorado

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 obtain a copy of Case Number 05-961 or meet with one or more WMFT members who may be familiar with the property. If there are narratives involving controlled substances or HazMat callouts, we would like to review those documents as well. We are only interested in issues involving controlled substances or hazardous materials responses. If no such records are available please let us know and we will merely make that notation in our report to the JeffCo Department of Health.

We will be performing the on-site assessment on November 14, 2008, and will need to review 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 Law Enforcement personnel across the State of Colorado, and we value and respect that open line of communication. I have included the SOQ of my Industrial Hygienist, as required by regulation

Sincerely,

Christine A Carty

Christine A. Carty

President

# FIELD OBSERVATIONS INDICIA INVENTORY FORM

| FACTs project name: DVI | Form # ML5                       |  |  |
|-------------------------|----------------------------------|--|--|
| Date: November 14, 2008 |                                  |  |  |
| Reporting IH:           | Caoimhín P. Connell, Forensic IH |  |  |

| Indicator                       | Functional<br>Space | Indicator                | Functional Space                                |
|---------------------------------|---------------------|--------------------------|---|
| Acids                           | 6,163               | Forced entry             | 1   |
| Aerosol cans                    | 6                   | Glassware                | 163   |
| Alcohols                        | 6,163               | Heating mantle           | 6   |
| Ammunition                      | 2, 15,16            | lodine                   | 6   |
| Artistic expressions            | 2,7,8,11,12,        | Match components         | 15,16③  |
| Bags of salt                    | 3①                  | Methamphetamine          | 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19 |
| Basters/Pipettes                | 3①                  | Needles/Syringes         | 1,6,8,16  |
| Batteries                       | 6,8,9,12,15         | Other OTC                | 3, 6,15   |
| Bi-phasic wastes                | 16③                 | pH indicators            | 6   |
| Bullet holes                    | 1, 12               | Pornography, Sex toys    | 1,3,4,6,8,13, 14,19,15                          |
| Burn marks                      | 3,8                 | Pseudoephedrine          | 3, 15③,16③                                      |
| Chemical storage                | 3,6,9               | Smoke detectors disabled | 7,8,9,10,11,13,14,15                            |
| Colored wastes                  | 16③                 | Drug paraphernalia       | 1,2,3,8,9,12,13,14,19,15                        |
| Aliphatics                      | 6                   | Aromatics                | 6   |
| OTC Containers                  | 163                 | Squalor                  | 1,2,3,4,6,7,8,9,10,11,12,13,14,15,16,17,18,19   |
| Ephedrine                       | 3,15                | Staining on floors       | 1,2,3,4,6,7,8,9,10,11,12,13,14,15,16,17,18,19   |
| Structural damage/modifications | 15,16               | Yellow staining          | 2,3,8,9,10,12,15                                |

# Notes

- ① Present but not as indicia
- ② Copious or unusual quantities
- ③ As reported by others (credible witnesses, Law Enforcement, etc).
- 4 Modified in manner consistent with clanlab use

|          |       | oject name: DVRM Form # ML6 vember 14, 2008 |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   |  |
|----------|-------|---|------|-------|------|------|-------|--------|--------|------|-------|-----|-------|-------|-------|------|--------|-----|-----|---|--|
|          |       |   |      | er 1  | 4, 2 | 2008 | 3     | · oim- | hín    | P. C | `on:- | יום | For   | no!   | o III |      |        |     |     |   |  |
| port     | ing   |   | 1:   |       |      |      | Ca    | 10111  | 111111 | P. C | OIII  | en, | FOI   | #1151 | CIN   |      |        |     |     |   |  |
| escribe  | e/ide | ntif  | y ad | ljace | nt a | reas | whe   | ere c  | onta   | amin | ants  | ma  | y ha  | ve n  | nigra | ated | •      | ī   | ī   | T | Ţ  |
|          |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   | _  |
|          |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   | -  |
|          |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   | _  |
|          |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   | —  |
|          |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   |  |
|          |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   | <u> </u>   |
|          |       | Nα  | an   | par   | ent  | fua  | itive | en     | าเรร   | ions | s as  | soc | ciate | ed w  | /ith  | this | pro    | pe  | rtv |   | _  |
|          |       |   | -    | J     |      | 3    |       |        |        |      |       |     |       |       |       |      | ļ- · · | - p | -,  |   | -  |
|          |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   | <u> </u>   |
|          |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   |  |
|          |       |   |      |       |      |      |       |        |        | 1    |       |     |       |       |       |      |        | 1   | 1   |   |  |
|          |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   |  |
|          |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   |  |
|          |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   |  |
|          |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   |  |
|          |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   |  |
|          |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   |  |
|          |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   |  |
|          |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   |  |
|          |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   |  |
|          |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   | T  |
|          |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   | 1  |
|          |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   |  |
|          |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   |  |
|          | +     |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   | T  |
|          |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   | T  |
|          | +     |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   | <del>                                     </del> |
|          |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   | +  |
|          | -     |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   | $\vdash$   |
|          | -     |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   | $\vdash$   |
|          |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   | $\vdash$   |
| $\vdash$ |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   |  |
|          |       |   |      |       |      |      |       |        |        |      |       |     |       |       |       |      |        |     |     |   | -  |

| Describe the area: | (Approximate lay-out; Not to scale) |
|--------------------|-------------------------------------|
|                    |                                     |
|                    |                                     |
|                    |                                     |



# INDIVIDUAL SEWAGE DISPOSAL SYSTEM FIELD FORM

| FACTs project name: DVRM                  |  | Form # ML7 |  |
|---|--|------------|--|
| Date: November 14, 2008                   |  |            |  |
| Reporting IH: Caoimhín P. Connell, Forens |  | : IH       |  |

|   | Yes | No | N/C |
|---|-----|----|-----|
| Does the property have an ISDS  |     | Х  |     |
| Is there unusual staining around internal drains                                | Х   |    |     |
| Are solvent odors present from the internal drains (Interference by maintenance |     |    |     |
| firm winterizing drains prevented determination).                               |     |    |     |
| Are solvent odors present from the external sewer drain stacks                  |     |    | Χ   |
| Was the septic tank lid(s) accessible   | NA  |    |     |
| Was the leach field line accessible   | NA  |    |     |
| Was the septic tank or leach field lines opened                                 | NA  |    |     |
| Are solvent odors present from the leach field lines (if "yes" see below)       | NA  |    |     |
| Are solvent odors present from the septic tank (if "yes" see below)             | NA  |    |     |
| Is "slick" present in the septic tank   | NA  |    |     |
| Are biphasic (aqueous-organic) layers present in the septic tank                | NA  |    |     |
| Was pH measured in the septic tank (pH =7 to 8)                                 | NA  |    |     |
| Were organic vapors measured in the septic tank (if "yes" see below)            | NA  |    |     |
| Is there evidence of wastes being disposed down internal drains                 | NA  |    |     |
| Is sampling of the ISDS warranted   | NA  |    |     |
| Were calawasi/drum thief samples collected from the septic tank                 | NA  |    |     |

<sup>\*</sup>NC = Not checked

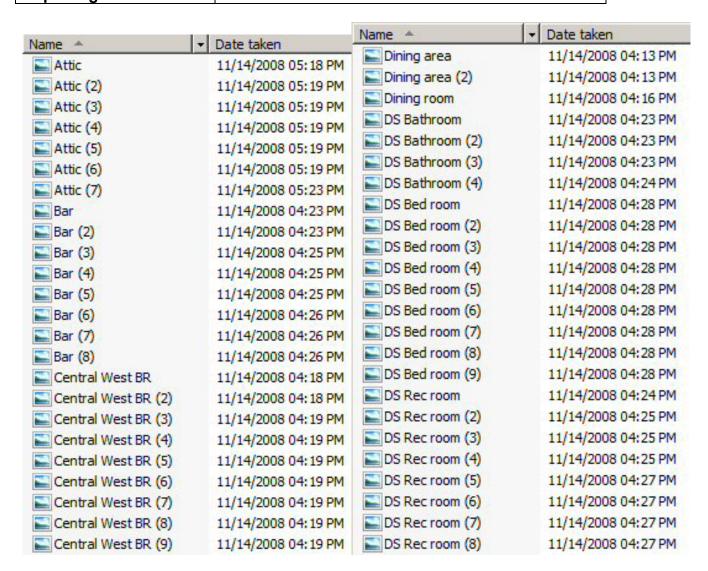
Qualitative Organic Vapor Monitoring

| Hydrocarbon detector model | EnMet Target Series, MOS detector |
|----------------------------|-----------------------------------|
| NA                         | NA                                |
|                            |                                   |
|                            |                                   |
|                            |                                   |

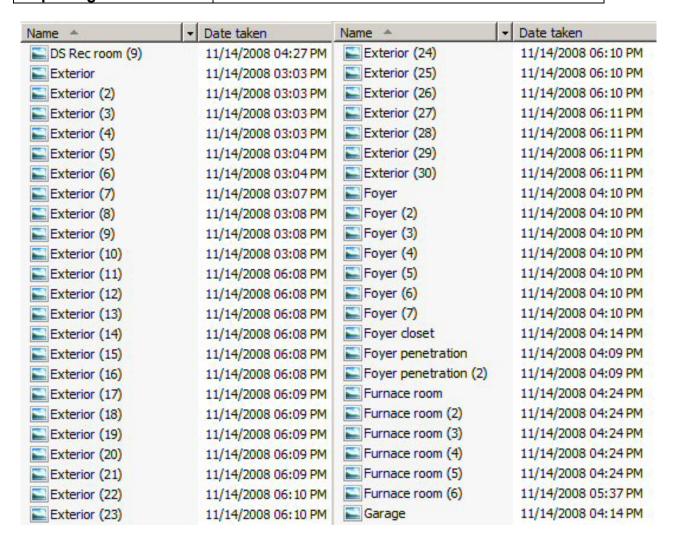
| Location | MOS* | PID* | FID* |
|----------|------|------|------|
| NA       | NA   | NA   | NA   |
|          |      |      |      |
|          |      |      |      |
|          |      |      |      |
|          |      |      |      |
|          |      |      |      |
|          |      |      |      |
|          |      |      |      |
|          |      |      |      |

<sup>\*</sup>Units of measurement are in parts per million equivalents compared to the calibration vapor.

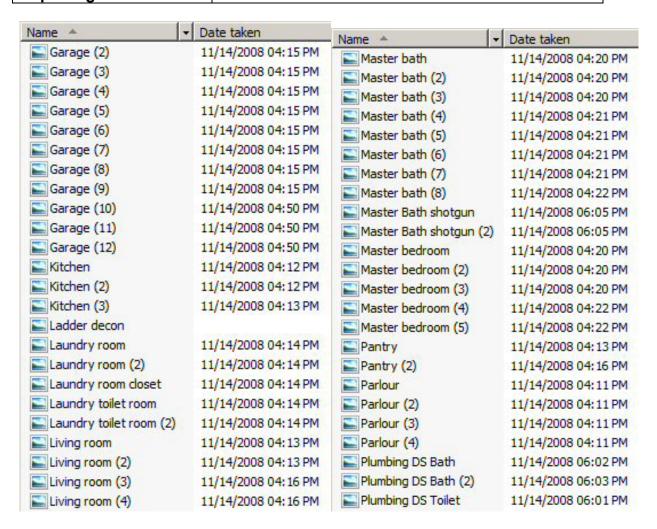
| FACTs project name: DVRM |                                  | Form # ML8 |  |
|--------------------------|----------------------------------|------------|--|
| Date: November 14, 2008  |                                  |            |  |
| Reporting IH:            | Caoimhín P. Connell, Forensic IH |            |  |



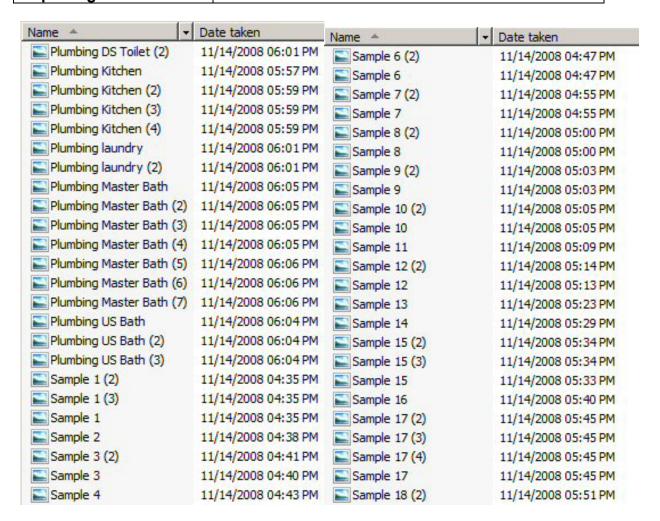
| FACTs project name: DVRM |                                  | Form # ML8 |
|--------------------------|----------------------------------|------------|
| Date: November 14, 2008  |                                  |            |
| Reporting IH:            | Caoimhín P. Connell, Forensic IH |            |



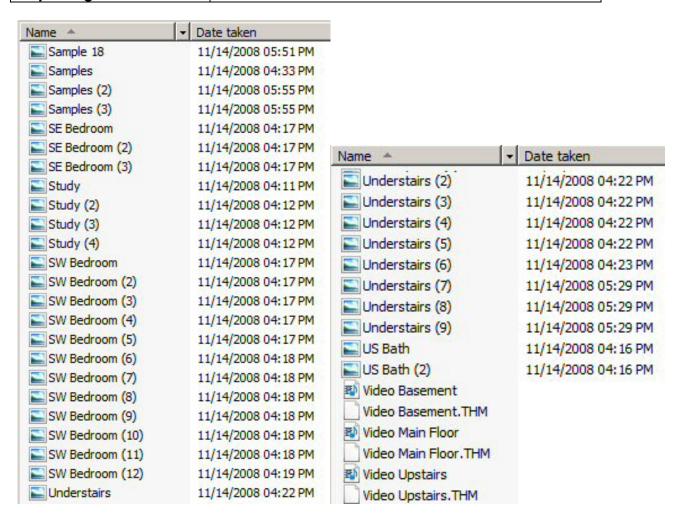
| FACTs project name: DVRM |                                  | Form # ML8 |
|--------------------------|----------------------------------|------------|
| Date: November 14, 2008  |                                  |            |
| Reporting IH:            | Caoimhín P. Connell, Forensic IH |            |



| FACTs project name: DVRM |                                  | Form # ML8 |
|--------------------------|----------------------------------|------------|
| Date: November 14, 2008  |                                  |            |
| Reporting IH:            | Caoimhín P. Connell, Forensic IH |            |



| FACTs project name: DVI | Form # ML8                       |  |  |  |  |
|-------------------------|----------------------------------|--|--|--|--|
| Date: November 14, 2008 |                                  |  |  |  |  |
| Reporting IH:           | Caoimhín P. Connell, Forensic IH |  |  |  |  |



| FACTs project name: DVRM Form # ML9 |                                  |  |  |  |  |  |
|-------------------------------------|----------------------------------|--|--|--|--|--|
| Date: November 14, 2008             |                                  |  |  |  |  |  |
| Reporting IH:                       | Caoimhín P. Connell, Forensic IH |  |  |  |  |  |

Not Applicable

|           | RAWING OF COOK AREA(S) |  |             |      |      |    |     |     |      |     |      |      |      |      |      |      |     |      |          |  |
|-----------|------------------------|--|-------------|------|------|----|-----|-----|------|-----|------|------|------|------|------|------|-----|------|----------|--|
| FACTs p   |                        |  |             |      |      |    |     |     |      |     |      |      |      | Fo   | rm # | # ML | .10 |      |          |  |
| Date: No  |                        |  | <u>er 1</u> | 4, 2 | 2008 |    |     |     |      |     |      |      |      |      |      |      |     |      |          |  |
| Reportin  | ıg II                  | <del>1</del> :   |             |      |      | Ca | oim | hín | P. C | onn | ell, | Fore | ensi | c IH |      |      |     |      |          |  |
|           | 1                      |  |             |      |      |    |     |     |      |     |      |      |      |      |      |      |     |      |          |  |
|           |                        |  |             |      |      |    |     |     |      |     |      |      |      |      |      |      |     |      |          |  |
|           |                        |  |             |      |      |    |     |     |      |     |      |      |      |      |      |      |     |      |          |  |
|           |                        |  |             |      |      |    |     |     |      |     |      |      |      |      |      |      |     |      |          |  |
|           |                        |  |             |      |      |    |     |     |      |     |      |      |      |      |      |      |     |      |          |  |
|           |                        |  |             |      |      |    |     |     |      |     |      |      |      |      |      |      |     |      |          |  |
|           | -                      |  |             |      |      |    |     |     |      |     |      |      |      |      |      |      |     |      |          |  |
|           |                        |  |             |      |      |    | Se  | е В | ody  | of  | Rep  | ort  |      |      |      |      |     |      |          |  |
|           |                        |  |             |      |      |    |     |     | •    |     | ·    |      |      |      |      |      |     |      |          | -  |
|           |                        |  |             |      |      |    |     |     |      |     |      |      |      |      |      |      |     |      |          |  |
|           | 1                      |  |             |      |      |    |     |     |      |     |      |      |      |      |      |      |     |      |          | -  |
|           |                        |  |             |      |      |    |     |     |      |     |      |      |      |      |      |      |     |      |          | -  |
|           |                        |  |             |      |      |    |     |     |      |     |      |      |      |      |      |      |     |      |          | -  |
|           |                        |  |             |      |      |    |     |     |      |     |      |      |      |      |      |      |     |      |          |  |
|           |                        |  |             |      |      |    |     |     |      |     |      |      |      |      |      |      |     |      |          | <del>                                     </del> |
|           |                        |  |             |      |      |    |     |     |      |     |      |      |      |      |      |      |     |      |          |  |
|           |                        |  |             |      |      |    |     |     |      |     |      |      |      |      |      |      |     |      |          |  |
|           |                        |  |             |      |      |    |     |     |      |     |      |      |      |      |      |      |     |      |          |  |
|           |                        |  |             |      |      |    |     |     |      |     |      |      |      |      |      |      |     |      |          |  |
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| Foot arid | <u> </u>               |  |             |      |      |    |     |     |      |     |      |      |      |      |      |      |     |      |          |  |
|           |                        | uals approximately (Approximate lay-out; Not to scale) |             |      |      |    |     |     |      |     |      |      |      |      |      |      |     |      |          |  |
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|        |      |        |      | roject name: DVRM Form # ML11        |      |           |      |          |          |          |         |    |        |      |      |       |       |            |      |      |    |          |          |
|--------|------|--------|------|--------------------------------------|------|-----------|------|----------|----------|----------|---------|----|--------|------|------|-------|-------|------------|------|------|----|----------|----------|
| Da     | ate: | No     | ove  | mb                                   |      |           | 2008 | 3        |          |          |         |    |        |      |      | •     |       |            |      |      |    |          |          |
| Re     | po   | rtin   | g II | IH: Caoimhín P. Connell, Forensic IH |      |           |      |          |          |          |         |    |        |      |      |       |       |            |      |      |    |          |          |
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| <br>Fa | ch a | ırid e | gua  | ls a                                 | ppro | l<br>xima | tely | <u> </u> | <u> </u> | <u> </u> |         |    | (App   | orox | imat | e lav | /-0U1 | L<br>t: N∩ | t to | scal | e) | <u></u>  | <u> </u> |
| De     | escr | ribe   | the  | are                                  | ea:_ |           |      |          |          |          |         |    | ا۲۰ ۰۰ |      |      |       |       |            |      |      |    |          | _        |
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| <b>ACTs</b> | proje | roject name: DVRM Form # ML12 |          |          |          |          |    |          |       |          |          |               |   |          |          |          |   |   |
|-------------|-------|-------------------------------|----------|----------|----------|----------|----|----------|-------|----------|----------|---------------|---|----------|----------|----------|---|---|
| ate: N      | love  | vember 14, 2008               |          |          |          |          |    |          |       |          |          |               |   |          |          |          |   |   |
| Reporti     | ng II |                               |          |          |          |          |    |          |       |          |          |               |   |          |          |          |   |   |
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|             |       |                               |          |          |          |          |    |          |       |          |          |               |   |          |          |          |   |   |
|             |       |                               |          |          |          |          |    |          |       |          |          |               |   |          |          |          |   |   |
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|             |       |                               |          |          |          |          |    |          |       |          |          |               |   |          |          |          |   |   |
|             |       |                               |          |          |          |          |    |          |       |          |          |               |   |          |          |          |   |   |
|             |       |                               |          |          |          |          |    |          |       |          |          |               |   |          |          |          |   |   |
|             |       |                               |          |          |          |          |    |          |       |          |          |               |   |          |          |          |   |   |
|             |       |                               |          |          |          |          |    |          |       |          |          |               |   |          |          |          |   |   |
|             |       |                               |          |          |          |          |    |          |       |          |          |               |   |          |          |          |   |   |
|             |       |                               |          |          |          |          |    |          |       |          |          |               |   |          |          |          |   |   |
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| $\bot$      |       |                               |          |          |          |          |    |          |       |          |          |               |   |          |          |          |   |   |
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| Describe the area: | ( ) |  |
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# CERTIFICATION, VARIATIONS AND SIGNATURE SHEET

| FACTs project name: DVI | Form # ML14                      |  |  |  |  |  |
|-------------------------|----------------------------------|--|--|--|--|--|
| Date: November 28, 2008 |                                  |  |  |  |  |  |
| Reporting IH:           | Caoimhín P. Connell, Forensic IH |  |  |  |  |  |

### 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.    | Not Applicable    |
| I do hereby certify that I conducted post-decontamination clearance sampling in accordance with 6 CCR 1014-3, §6.                  | xxxxxxxxxxxxxxxxx |
| I do hereby certify that the cleanup standards established by 6 CCR 1014-3, § 7 have been met as evidenced by testing I conducted. | xxxxxxxxxxxxxxxxx |
| I do hereby certify that the analytical results reported here are faithfully reproduced.   | Callen            |

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

Prior to the involvement of FACTS, unauthorized parties entered the property, altering the conditions of the property. Some of the alterations, such as "winterization" activities by the contractor identified to us by the registered property owner as T.N.T Field Services. Since the plumbing features had been altered, FACTs was not able to determine the possibility of contaminant disposal in the sanitary sewer. However, since the property does not have an ISDS, this limitation is of reduced practical importance. Since regulations only require the Industrial Hygienist to assess the extant conditions of a property, the limitation does not actually constitute a variation, but is included here as a note.

# Pursuant to the language required in 6 CCR 1014-3, § 8:

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: November 28, 2008



# 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:                            | Deer Valley Road | Form # ML15 |  |  |  |
|--|------------------|-------------|--|--|--|
| Date: November 14, 2008                        |                  |             |  |  |  |
| Reporting IH: Caoimhín P. Connell, Forensic IH |                  |             |  |  |  |

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

Mr. Connell is a recognized authority in methlab operations and is a Certified Meth-Lab Safety Instructor through the Colorado Regional Community Policing Institute (Colorado Department of Public Safety, Division of Criminal Justice). Mr. Connell has provided methlab training for officers of over 25 Colorado Police agencies, 20 Sheriff's Offices, federal agents, and probation and parole officers from the 2<sup>nd</sup>, 7<sup>th</sup> and 9<sup>th</sup> Colorado judicial districts. He has provided meth-lab lectures to prestigious organizations such as the County Sheriff's of Colorado, the American Industrial Hygiene Association, and the National Safety Council, and Regis University.

Mr. Connell is Colorado's only private consulting Industrial Hygienist certified by the Office of National Drug Control Policy High Intensity Drug Trafficking Area Clandestine Drug Lab Safety Program, and P.O.S.T. certified by the Colorado Department of Law (Certification Number B-10670); he is a member of the Colorado Drug Investigators Association, the American Industrial Hygiene Association, and the Occupational Hygiene Society of Ireland.

He has received over 120 hours of highly specialized law-enforcement sensitive training in meth-labs and clan-labs (including manufacturing and identification of booby-traps commonly found at meth-labs) through the Iowa National Guard/Midwest Counterdrug Training Center and the Florida National Guard/Multijurisdictional Counterdrug Task Force, St. Petersburg College as well as through the U.S. Bureau of Justice Assistance (US Dept. of Justice). Additionally, he received extensive training in the Colorado Revised Statutes, including Title 18, Article 18 "Uniform Controlled Substances Act of 1992."

Mr. Connell is also a 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 80 assessments in illegal drug labs, and collected over 1,000 samples during assessments.

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 private consumers, state officials and Federal Government representatives with forensic 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 an author of a recent (2007) AIHA Publication on methlab assessment and remediation.

# FINAL DOCUMENTATION CHECKLIST

| FACTs project name: DVRM Form # ML16           |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| Date: November 14, 2008                        |  |  |  |  |  |  |
| Reporting IH: Caoimhín P. Connell, Forensic IH |  |  |  |  |  |  |

| Mandatory<br>Final Documents<br>6-CCR 1014-3 | DOCUMENTATION   | Included |
|--|---|----------|
| §8.1   | Property description field form   | 61       |
| §8.2   | Description of manufacturing methods and chemicals  | 0/       |
| §8.3   | Law Enforcement documentation review discussion   | 61       |
| §8.4   | Description and Drawing of Storage area(s)  | 0/       |
| §8.5   | Description and Drawing of Waste area(s)  | Cal      |
| §8.6   | Description and Drawing of Cook area(s)   | Carl     |
| §8.7   | Field observations field form   | Cal      |
| 80.1   | FACTs Functional Space inventory field form   | 0/       |
| 0 02   | Plumbing inspection field form  | Cal      |
| §8.8   | FACTs ISDS field form   | 0/       |
| §8.9   | Contamination migration field form  | 0/       |
| §8.10  | 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   | Cal      |
| §8.13  | Location and results of initial sampling with figure  | 0/       |
| §8.14  | FACTs health and safety procedures in accordance with OSHA  | Cal      |
| §8.15  | Contractor's description of decontamination procedures and each area that was decontaminated                    | NA       |
| §8.16  | Contractor's description of removal procedures each area where removal was conducted, and the materials removed | NA       |
| §8.17  | Contractor's description of encapsulation areas and materials   | NA       |
| §8.18  | Contractor's description of waste management procedures   | NA       |
| §8.19  | Drawing, location and results of final verification samples   | Canto    |
| §8.20  | FACTs Pre-remediation photographs and log   | Canto    |
|  | FACTs Post-remediation photographs and log  | NA       |
| §8.21  | FACTs SOQ   | Carl     |
| §8.22  | Certification of procedures, results, and variations  | Canton   |
| §8.23  | Mandatory Certification Language  | Cando    |
| §8.24  | Signature Sheet   | Canton   |
|  | Analytical Laboratory Reports   | Canton   |
|  | FACTs Field Sampling Forms  | Canton   |

# **APPENDIX C**

# **ANALYTICAL REPORTS FOR FACTS SAMPLES**

# SAMPLING FIELD FORM

| FACTs project name: DVRM                       | Form # ML17                           |
|--|---------------------------------------|
| Date: November 14, 2008                        | Alcohol Lot#: AØ8Ø1 Gauze Lot#: GØ8Ø5 |
| Reporting IH: Caoimhín P. Connell, Forensic IH | Preliminary X Intermediate Final      |

| Sample ID<br>DVRM1114- | Туре | Area/<br>Volume/<br>Weight | Location                       | Func.<br>Space | Dimensions (in) | Substrate | Result |
|------------------------|------|----------------------------|--------------------------------|----------------|-----------------|-----------|--------|
| -Ø1                    | W    |                            | Foyer top of door bell         | 1              | 2.5X8           | Pl        |        |
| -Ø2                    | W    |                            | Study top of Work Light        | 2              | *               | М         |        |
| -Ø3                    | W    |                            | Living room ceiling fan        | 3              | 18X2            | LW        |        |
| -Ø4                    | W    |                            | DS Toilet room top of light    | 4              | 1X18            | М         |        |
| -Ø5                    | W    |                            | Field Blank                    | NA             | NA              | NA        |        |
| -Ø6                    | W    |                            | Laundry Closet W Wall S Corner | 5              | 9X9             | PDW       |        |
| -Ø7                    | W    |                            | Garage top of light fixture    | 6              | 9X9             | М         |        |
| -Ø8                    | W    |                            | US SE Bedroom SE Corner S Wall | 7              | 9X9             | PDW       |        |
| -Ø9                    | W    |                            | US SW Bedroom Top of Dresser   | 8              | 9X9             | LW        |        |
| -1Ø                    | W    |                            | US W Bedroom TV Stand          | 9              | 9X9             | М         |        |
| -11                    | W    |                            | Master bedroom ceiling fan     | 11             | **              | PW        |        |
| -12                    | W    |                            | US Bath top of light fixture   | 10             | (9X7)X2         | М         |        |
| -13                    | W    |                            | Attic galvanized exhaust stack | 19             | 4X18            | М         |        |
| -14                    | W    |                            | Under stairs E Wall            | 13             | 9X9             | PDW       |        |
| -15                    | W    |                            | DS Bath West Wall N side       | 14             | 9X9             | PDW       | `      |

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



# SAMPLING FIELD FORM

| FACTs project name: DVRM                       | Form # ML17                           |
|--|---------------------------------------|
| Date: November 14, 2008                        | Alcohol Lot#: AØ8Ø1 Gauze Lot#: GØ8Ø5 |
| Reporting IH: Caoimhín P. Connell, Forensic IH | Preliminary X Intermediate Final      |

| Sample ID<br>DVRM1114- | Туре | Area/<br>Volume/<br>Weight | Location                     | Func.<br>Space | Dimensions (in) | Substrate | Result |
|------------------------|------|----------------------------|------------------------------|----------------|-----------------|-----------|--------|
| -16                    | W    |                            | Bar Area TV cabinet shelf    | 15             | 9X9             | VW        |        |
| -17                    | W    |                            | Furnace interior return duct | 19             | 9X9             | M         |        |
| -18                    | W    |                            | DS Bedroom Closet Shelf      | 18             | 9X9             | PW        |        |
|                        |      |                            |                              |                |                 |           |        |
|                        |      |                            |                              |                |                 |           |        |
|                        |      |                            |                              |                |                 |           |        |
|                        |      |                            |                              |                |                 |           |        |
|                        |      |                            |                              |                |                 |           |        |
|                        |      |                            |                              |                |                 |           |        |
|                        |      |                            |                              |                |                 |           |        |
|                        |      |                            |                              |                |                 |           |        |
|                        |      |                            |                              |                |                 |           |        |
|                        |      |                            |                              |                |                 |           |        |
|                        |      |                            |                              |                |                 | _         | _      |
|                        |      |                            |                              |                |                 |           |        |

| Sample Types: W=Wipe; V=Microvacuum; A=Air; B=Buik; L=Ilquid Surfaces: DW= Drywall, P=Painted; W= Wood, L= Laminated, V= Varnished, M= Metal, C=Ceramic, PI=Plastic |
|---|
|   |
|   |
|   |
|   |
|   |
|   |
|   |

Established in 1979

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

Phone: 206-622-8353 Fax: 206-622-4623 E-mail: aci@acilabs.com

Website: www.acilabs.com

| Lab Reference:  | 08162-04          |
|-----------------|-------------------|
| Date Received:  | November 20, 2008 |
| Date Completed: | November 24, 2008 |

November 24, 2008

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

**CLIENT REF: DVRM** 

SAMPLES:

wipes/4

ANALYSIS:

Methamphetamine by Gas Chromatography-Mass Spectrometry.

RESULTS:

in total micrograms (ug)

| Sample                             | Methamphetamine, ug | % Surrogate<br>Recovery |
|------------------------------------|---------------------|-------------------------|
| DVRM111408 - 03                    | 25.3                | 92                      |
| DVRM111408 - 11                    | 450                 | 126                     |
| DVRM111408 - 13                    | 11.2                | 92                      |
| DVRM111408 - 17                    | 62.9                | 127                     |
| QA/QC Method Blank                 | < 0.004             |                         |
| QC 2.00 ug Standard                | 2.08                |                         |
| QA 0.020 ug Matrix Spike           | 0.022               |                         |
| 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
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Page

of

please do not write in shaded areas.

| PROJECT Name/No:  eMail: Fiosrach@aol.com SAMPLER NAME: Caoimhfin P. Connell Number  DVRM1114Ø8-03  DVRM1114Ø8-11  DVRM1114Ø8-17 | DVRM       | (        |               |   |             |        |           |                   |    |                         |  |              |
|--|------------|----------|---------------|---|-------------|--------|-----------|-------------------|----|-------------------------|--|--------------|
| SAMPLER NAME: Caoimhín P. Conn LAB Sample Number Number DVRM1114Ø8-0 DVRM1114Ø8-1 DVRM1114Ø8-1                                   |            | 3        | COMPANY:      | Forensic Applications, Inc.               | Applica     | tions, | Inc.      |                   |    | 1 Metham<br>2 Use entir | Methamphetamine<br>Use entire contents |              |
| SAMPLER NAME: Caoimhín P. Connumber Number  DVRM111408-0: DVRM111408-1: DVRM111408-1:  | ш          | A        | ADDRESS:      | 185 Bounty Hunters Lane, Bailey, CO 80421 | Hunters     | Lane,  | Bailey,   | CO 8042           | 21 | 3                       |  |              |
|  | nell       |          | PHONE         | 303-903-7494                              | 7494        |        |           |                   |    | 5<br>6 Not Submitted    | mitted                                 |              |
|  |            |          | SAMPLE MATRIX | MATRIX                                    | AA          | VALYS  | IS RE     | ANALYSIS REQUESTS |    | SAMPLER                 | (48                                    | Noof         |
| DVRM1114Ø8-Ø:  DVRM1114Ø8-1:  DVRM1114Ø8-1:  | <b>J</b> 6 | Wipe     | Vacuum        | n Other                                   | 7           | 2      | 3 4       | 5 6               |    | COMMENTS                | COMMENTS                               | rs Contained |
| DVRM1114Ø8-1:<br>DVRM1114Ø8-1:   | 33         | ×        |               |   | ×           | ×      |           |                   |    |                         |  |              |
| DVRM1114Ø8-10  | 11         | ×        |               |   | ×           | ×      |           |                   |    |                         |  | 7            |
| DVRM1114Ø8-1   | 13         | ×        |               |   | ×           | ×      |           |                   |    | US 25%                  |  |              |
|  | 21         | ×        |               |   | ×           | ×      |           |                   |    |                         |  |              |
|  | 44         |          |               |   |             |        |           |                   |    |                         |  |              |
|  |            |          |               |   |             |        |           |                   |    |                         |  |              |
|  |            |          |               |   |             |        |           |                   |    |                         |  |              |
|  | Days (     |          |               | i sasa i                                  |             |        |           |                   |    |                         |  |              |
|  |            |          |               |   |             |        |           |                   |    |                         |  |              |
| CHAIN OF CUSTODY RECORD  | SECORD     |          | Wipes R       | Wipes Results in:                         | □ µg/100cm² |        |           | X Total µg        |    | Total Numbe             | Total Number of Containers             | 4            |
| PRINT NAME Signature   | me         | COMPANY  | W             | DATE                                      | TIME        | 111    | Turnar    | Turnaround Time   | -  | Custody Seals:          | Yes                                    | 8            |
| Caoimhín P. Connell  |            | FACTs, I | lnc.          | 11/17/08                                  | 12:15Am     | D WH   |           | 24 Hours (2X)     |    | Container:              | mtact                                  | Broken       |
| MIA SAZON adem   |            | ACL      |               | 11/20/08                                  | 1300        | -      | □ 2 D     | 2 Days (1.75X)    |    | Temperature:            | &mbient                                | Cooled       |
|  |            |          |               |   |             |        | 3 08      | 3 Days (1.5X)     |    | Inspected By:           | MIA SAZON                              | Azon         |
|  |            |          |               |   |             |        | X Routine | tine              |    | Lab File No.            | 9180                                   | 40-29180     |

# **APPENDIX D**

# COMPACT DIGITAL DISC PHOTOGRAPHS