

#### FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

Preliminary Assessment
of an
Identified Illegal Drug Laboratory
at
Room 202
8350 Razorback Drive,
Colorado Springs, CO 80920

Prepared for:
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#### **EXECUTIVE SUMMARY**

Sometime during 2001, on an undetermined date, personnel from Colorado Springs Police Department (and possibly other agencies), allegedly engaged in controlled substance related activity resulting in the discovery of a an illegal drug laboratory in Room 202 of the hotel structure located at 8350 Razorback Drive, in Colorado Springs, Colorado (the subject property).

In the early part of 2010 (Approximately April 2010), the property mortgage holder, Zions First National Bank, received the property through a filed foreclosure. In July of 2010, Forensic Applications Consulting Technologies, Inc. (FACTs) was contracted to perform a standard Preliminary Assessment (PA) at the subject property pursuant to Colorado Regulation 6 CCR 1014-43, Part 4.

The process of the PA was temporarily suspended by Zions First National Bank during August 200 and was reactivated in September, 2010.

Samples taken during the PA conclusively demonstrated the presence of methamphetamine contamination in three rooms and, pursuant to Colorado Revised Statutes §25-18.5-101(2.7) and CRS §16-13-103, those three rooms meet the definition of an "illegal drug laboratory." Based on the totality of the circumstances, FACTs makes the following observations:

- Isolated portions of the property exhibit overt noncompliance with Colorado's methamphetamine cleanup standards.
- "Discovery" and "Notification" existed by virtue of the samples FACTs collected from the property on July 27, 2010 and which were reported to the Registered Owner's representative on Thursday, August 5, 2010.
- A noncompliant illegal drug lab, as that term is defined in CRS §25-18.5-101, existed at the subject property from at least August 5, 2010 forward, and continues to exist at the time of this report.
- A Class 1 Public Nuisance, as defined in CRS §16-13-303(1) existed at the subject property from at least August 5, 2010 forward, and continues to exist at the time of this report.
- Following the decontamination activities, a qualified Industrial Hygienist must perform the post-decontamination process and issue a Decision Statement before reentry or occupancy of the subject rooms within the property may occur.

• The PA and sampling was performed by Mr. Caoimhín P. Connell, Forensic Industrial Hygienist with FACTs, who was assisted in the field by Chris Carty, Field Technician <sup>1</sup>

# REGULATORY REQUIREMENTS

#### Federal Requirements

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

#### State Requirements

#### **Preliminary Assessment**

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

The PA must be conducted according to specified requirements<sup>3</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 PA pursuant to those regulations. Included with this discussion is a read-only digital disc. The disc contains mandatory information and photographs required by State regulation for a PA. This PA is not complete without the DVD and all associated support documents.

Pursuant to CRS §25-18.5-105, the referenced areas at the subject property are deemed a "public health nuisance." Pursuant to CRS §16-13-303, the referenced areas at the subject property are 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 question being raised during a real estate transaction by a potential buyer of the hotel structure. In Colorado, potential methamphetamine contamination during property transactions is



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

<sup>&</sup>lt;sup>2</sup> Section 8.26 of 6 CCR 1014-3

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

addressed by Colorado's Real Estate methamphetamine disclosure and testing statute CRS §38-35.7-103.

#### **Preliminary Hypothesis**

During the PA, 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>requires</u> the Industrial Hygienist to accept the null hypothesis and declare the area non-compliant.<sup>4</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 illegal drug 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 PA; however, if sampling is performed, it is conducted in the areas with the highest probability of containing the highest possible concentrations of contaminants. According to the State regulations:<sup>5</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, objective sampling performed by FACTs confirmed overt methamphetamine contamination in three of the rooms. In the totality of circumstances, any one of the samples would challenge the Primary Hypothesis, and require FACTs to accept the null hypothesis and declare the primary structure and all contents therein as non-compliant.

# **Elements of the Preliminary Assessment**

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

<sup>&</sup>lt;sup>5</sup> Section 4.6 of 6 CCR 1014-3



<sup>&</sup>lt;sup>4</sup> This language and emphasis is verbatim from Appendix A (mandatory) of 6 CCR 1014-3

Mandatory Final Documents 6-CCR 1014-3	DOCUMENTATION	Included
§8.1	Property description field form	01
§8.2	Description of manufacturing methods and chemicals	0/
§8.3	Law Enforcement documentation review discussion	0/
§8.4	Description and Drawing of Storage area(s)	0/
§8.5	Description and Drawing of Waste area(s)	C./
§8.6	Description and Drawing of Cook area(s)	Carl
§8.7	Field Observations field form	Carl
30.7	FACTs Functional space inventory field form	Carl
§8.8	Plumbing inspection field form	Carl
30.0	FACTs ISDS field form	Carl
§8.9	Contamination migration field form	Carl
§8.10	Identification of common ventilation systems	Cal
§8.11	Description of the sampling procedures and QA/QC	Carl
§8.12	Analytical Description and Laboratory QA/QC	Carl
§8.13	Location and results of initial sampling with drawings	Can
§8.14	FACTs health and safety procedures in accordance with OSHA	Carl
§8.15 -8-19	These sections are not applicable to a Preliminary Assessme	ent
§8.20	FACTs Pre-remediation photographs and log	Can
	FACTs Post-remediation photographs and log	NA
§8.21	FACTs SOQ	Can
§8.22	Certification of procedures, results, and variations	Can
§8.23	Mandatory Certification Language	Can
§8.24	Signature Sheet	Can
	Analytical Laboratory Reports	Carl
NA	FACTs final closeout inventory document	NA
	FACTs Field Sampling Forms	Carl

# Table 1 Inventory of Mandatory Elements and Documentation

# **Subject Structure**

The primary residential structure was listed by the El Paso County Assessor's Office as a 22,381 square foot commercial property built *circa* 1998. For the purposes of regulatory compliance, the size of the affected property is determined by the Industrial Hygienist. For the purposes of this PA, we approximated a total of 1929 square feet of impacted floor space from the summation of the following areas:

- 1. Room 202
- 2. Room 203
- 3. Room 204
- 4. Room 302
- 5. Second floor hallway from Room 202 to Room 204
- 6. West stairwell



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



Figure 1 General Site Layout<sup>6</sup>

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

As part of the Preliminary Assessment, FACTs is required by regulation<sup>7</sup> to review available law enforcement documents pertinent to a subject property.

# **County Jurisdiction**

During this assessment, the El Paso County Sheriff's Office exhibited the highest degree of professionalism and immediately responded to our July 21, 2010 request for information, indicating that they did not have any records pertinent to this property.

# **Municipal Jurisdiction**

On July 21, 2010, FACTs made a written request to the Governing Body (Colorado Springs Police Department, CSPD) for this property. In 2009, FACTs was explicitly instructed by the Colorado Springs Police Department to make all requests pursuant to 6 CCR 1014-3 to the V&N Section. Having made our written request to V&N, personnel at V&N informed FACTs that they were not the correct office to contact and the request must be made to CSPD "Records and ID."

<sup>&</sup>lt;sup>8</sup> Preliminary Assessment of an Identified Illegal Drug Laboratory at 2927 Main Street Colorado Springs, CO, 80907-6013 October 13, 2009 (Public Domain Document prepared by FACTs and held at Colorado Springs Police Department)



<sup>&</sup>lt;sup>6</sup> Image from GOOGLE EARTH

<sup>&</sup>lt;sup>7</sup> 6 CCR 1014-3 (Section 4.2)

Personnel at Colorado Springs Police Department "Records and ID" informed FACTs that it was a "violation of State law" to release the mandatory information. The Records and ID personnel were unable to specify which "State law" was in danger of violation, but assured FACTs that our requests violate "State law" anyway.

Records and ID informed FACTs that following a written request there was a six week waiting period since information must be "redacted" from the public record by the Records and ID personnel. When we asked what form "redaction" would take, the Records personnel informed us that they would censor out any information from the public record that they "felt" we did not need to know.

In fact, historically, the Governing Body for this property merely ignores requests for information made pursuant to State statutes and State regulations, and FACTs is still awaiting (in one case for over a year) for responses for written requests for information for other properties within this jurisdiction including:

2927 Main Street, Colorado Springs, CO (information requested September 15, 2009)

1314 W Kiowa Street, Colorado Springs, CO (information requested April 22, 2010)

2350 Orchard Valley Road, Colorado Springs, CO (information requested August 21, 2010)

Therefore, we do not expect to receive a response to our July 21, 2010 written request for information on this subject property. As such there are gaps in the information necessary to properly process this property pursuant to Regulation that are beyond the control of FACTs. The Colorado Springs Police Department is the only agency in the State of Colorado which ignores requests for information made pursuant to 6 CCR 1014-3 and who erroneously believes that there are some unspecified "State laws" disallowing the release of the information, even when the material is requested pursuant to State regulations.

Without exception, all other Colorado Law Enforcement agencies have exhibited the highest degree of professionalism with regard to our regulatory requests, recognizing that the hazards associated with methamphetamine laboratories poses a significant threat to the citizens of their communities.

# **Governing Body**

The Colorado Springs Police Department have identified themselves as the "Governing Body" as defined by CRS 25-18.5-101(2.5). The Governing Body is the office charged by State statute to administer the civil environmental regulations and civil real estate statutes. The address of the Governing Body for this property is:

Colorado Springs Police Department Vice and Narcotics Section 705 S Nevada Avenue Colorado Springs, CO 80903



#### County Requirements

The El Paso County Department of Health originally passed and enforced County-specific Methamphetamine Laboratory Cleanup Regulations. However, those regulations violated State regulations and State statutes and unlawfully granted regulatory relief in contradiction to State Legislative actions. Based on information from the El Paso County web-site dated September 22, 2009, the County Regulations have been withdrawn and are no longer in effect. We are not aware of other local regulations that may apply.

#### Visual Inspection of the Property

As part of the Preliminary Assessment, on July 27, 2010, Mr. Caoimhín P. Connell, Forensic Industrial Hygienist with FACTs, performed a visual inspection of the subject property. Pursuant to regulatory requirements, the subject property was assigned into "functional spaces," and an inventory of indicia and assessment was performed for each functional space.

The property was essentially in an "occupied" condition, and was fully furnished and contained typical hotel room furniture and major appliances.

To protect the property owner against the introduction of contaminants into the subject property, the Industrial Hygienist and his Technician donned fresh Tyvek<sup>®</sup> booties upon entering the property. All equipment brought into the subject property was staged at the entrance to the second floor hallway.

Additionally, according to the mandatory sections of the Colorado Regulation:

Where the drug laboratory is located in a structure other than a single-family dwelling, the potential of fugitive emissions must be considered. For example, if the functional space was located in an hotel room, and evidence of contamination extended into the corridor, the elevator, the lobby, and one adjacent room, there would be four separate functional spaces to evaluate: 1) The primary hotel room, 2) the corridor/elevator complex 3) the lobby, 4) the adjacent hotel room.

Therefore, in addition to the room where the law enforcement action possibly occurred, we also considered fugitive migration issues to other rooms and the hallways. We have described the methods of evaluating fugitive emissions in a section below.

#### 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

<sup>&</sup>lt;sup>9</sup> Attachment "A" Regulations Of The El Paso County Board Of Health El Paso County, Colorado Chapter 4 *Methamphetamine Laboratory Cleanup Regulations*, March 23, 2005



Preliminary Assessment 8350 Razorback Drive 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>10</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:

Structure Number	Functional Space Number	Describe the functional space (See drawings for delineating structural features )
1	1	Room 202
1	2	Room 203
1	3	Room 204
1	4	Room 302
1	5	Second floor hallway
1	6	West stair well connecting the 2 <sup>nd</sup> and 3 <sup>rd</sup> floors

Table 2 Functional Space Inventory

#### Functional Space 1: Room 202

Based on the best information available, we believe that this functional space may have been the room in which law enforcement activities occurred in 2001. This functional space is a typical fully furnished hotel room except that the room contains a small Jacuzzi. The room appears to have a single dedicated heating and ventilation unit which does not communicate with other areas of the structure. A discreet sample collected from this room confirmed overt noncompliant concentrations of methamphetamine.

# Identification of Cook/Storage Areas

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

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

In this case, since CSPD does not respond to requests for information, we cannot know the actual circumstances surrounding the room. However, based on the best information available, we believe that this room was used for a methamphetamine cooking process.

If the room was used as a cooking area, the most probable cook method would have been a pseudoephedrine reduction using the "Red-P" cooking method.

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



#### **Identification of Contamination Migration and Fugitive Emissions**

Pursuant to State regulations, the Industrial Hygienist is required to evaluate the potential for fugitive emissions. Fugitive emissions can be assessed in a number of ways. During our PA, FACTs used two methods to evaluate the potential for fugitive emissions.

#### **Pressure Differential Mapping**

Using standard ventilation fume challenges, FACTs determined that, on the day of our visit, during the PA, Room 202 was slightly negative to the main hallway. That is, air movement (and therefore, airborne contaminant migration) was from the hallway into the room.

We also observed that each of the surrounding walls was static (no net pressure differential), except the north wall (exterior wall), which was strongly negative (air flow was from the subject room into the wall cavity).

Based on these observations, FACTs would conclude that if methamphetamine was processed on the day of the PA, there would have been only limited potential for migration of airborne contaminants from the subject room into surrounding areas.

#### **Ultrafine Particle Challenge**

Since Room 204 was not available to us on the day of our PA, FACTs believed that a more qualitative determination of migration potential was warranted. During our Preliminary Assessment, FACT also employed a standard Industrial Hygiene fugitive emissions and migration technique to determine the probability of migration of airborne contaminants from one location in the structure to another.

To perform this evaluation, a tracer of ultrafine particles (UFPs) is released into the study area (Room 202) and the concentrations of the UFPs are subsequently measured in test areas (other adjoining areas).

The tracer UFP is an aerosolized fume of titanium tetrachloride, and the detection device we used is a laser condensation nephelometer.

Prior to the start of the test, we established that the ambient concentration of UFPs in the general structure, the test room and all subsequent study areas was approximately 4,000 UFPs per cubic centimeter of air (4kp/cm2), except Room 203 which had a stable background UFP concentration of 12kp/cm2.

We increased the UFP concentration in Room 202 by 50 times to 200kp/cm2. Then, over the course of the next five minutes, we measured the concentration of UFPs in surrounding rooms, stairways and hallways.

At the end of the challenge, we observed the following:

- 1. The concentration of UFPs in Room 202 decayed to 100kp/cm2
- 2. The concentration of UFPs in Room 203 decreased slightly to 11kp/cm2
- 3. The concentration of UFPs in Room 204 was not measured due to occupancy.
- 4. The concentration of UFPs in Room 302 increased slightly to 5kp/cm2
- 5. The concentration of UFPs in the Second Floor Hall remained stable at 4kp/cm2
- 6. The concentration of UFPs in the Stairwell remained stable at 4kp/cm2
- 7. The concentration of UFPs in the Third Floor Hall remained stable at 4kp/cm2

Based on this study, in conjunction with the pressure differential mapping, FACTs concluded that, pending sample results, and in the absence of contradictory information, we would conclude that the remaining, inaccessible room (Room 204) was not contaminated.

Unfortunately however, the quantitative sampling did provide contradictory evidence of fugitive emissions and indicated that migration of contaminants occurred into Room 302, directly above Room 202. Sampling confirmed, however, that significant migration did not occur into the hallways or stair well.

As such, FACTs concluded that Room 204 would need to be sampled to exclude the room from remediation, or, pursuant to regulation, Room 204 must be presumed to be noncompliant and must be included in the remediation plan.

The Client instructed FACTs to return to the site and collect the regulatory sample from Room 204. As described below, that sample confirmed noncompliant concentrations of methamphetamine in Room 204.

# Functional Space 2: Room 203

Room 203 is situated across the hall from Room 202. This functional space is a typical fully furnished hotel room. The room appears to have a single dedicated heating and ventilation unit which does not communicate with other areas of the structure. A discreet sample collected from this room confirmed that concentrations of methamphetamine did not exceed State threshold levels.

# **Functional Space 3: Room 204**

Room 204 adjoins Room 202. This functional space is a typical fully furnished hotel room. The room appears to have a single dedicated heating and ventilation unit which does not communicate with other areas of the structure. A discreet sample collected from this room confirmed noncompliant concentrations of methamphetamine, and this room must be included in the remediation process.

# Functional Space 4: Room 302

Room 302 is situated directly above Room 202. This functional space is a typical fully furnished hotel room. The room appears to have a single dedicated heating and ventilation unit which does not communicate with other areas of the structure. A discreet sample collected from this room confirmed noncompliant concentrations of methamphetamine, and this room must be included in the remediation process.



#### **Functional Space 5: Second Floor Hallway**

This functional space is defined as an "hallway" as the term in commonly known.

There are three primary and competing regulatory factors in the collection of authoritative bias judgmental sampling as described in the regulations:

- 1) Collect at least 500 cm2 from each functional space AND
- 2) Collect samples only from nonporous surfaces AND
- 3) Collect samples only from those areas with the highest probability of contamination.

In some cases, it may be physically impossible to satisfy all three mandatory criteria. For example, in some cases, the only nonporous surface in a space may be too small, or in some cases, there may not be a nonporous surface in the entire functional space. Therefore, there becomes a need to balance the regulatory requirements with the physical reality of the site and the objectives of the sampling protocols.

In this case, the most suitable surface for determining contamination was from the tops of the door frames in the hallway. However, the tops of the door frames form a non-contiguous sampling surface. Although the regulations permit the collection of composite samples, the selection of the tops of the doorways did not fall under the meaning of a "composite" sample as described by regulation. Therefore, the sample, which was collected from the tops of five door frames constituted a noncontiguous discreet sample.

The sample thus collected from this functional space indicated that contamination did not result from the migration of materials to this area. This functional space has been excluded from the remediation process.

#### Functional Space 6: West Stairwell

This functional space is defined as a "stairwell" as the term in commonly known. The discreet sample collected from this space indicated that contamination did not occur as a result of activities in Room 202, and this area has been excluded from the remediation process.

#### **EXTERIOR GROUNDS**

Although not truly a functional space *per se*, the exterior grounds were assessed independently. We did not observe any evidence of stressed vegetation, and we did not observe any indicators that would suggest the exterior grounds were adversely affected by controlled substance activities.

# **SEWERAGE SYSTEM**

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

An inspection of the interior plumbing system was conducted. During the visual inspection, FACTs also employed direct reading instruments to evaluate the concentration of hydrocarbons and acid gases from the plumbing fixtures. FACT Field Form ML2 details the findings of the plumbing inspection. In summary FACTs did not observe any indicators that suggested the plumbing or sewer system was adversely affected

#### SAMPLE COLLECTION

#### Wipe Samples

The samples collected throughout the subject property comprised of "discreet" samples. Except as described for Functional Space Number 5, 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 Safeway<sup>TM</sup> brand gauze pads. Each gauze material was assigned a lot number for quality assurance and quality control (QA/QC) purposes and recorded on a log of results. Each pad was moistened with reagent grade methyl alcohol. Each batch of alcohol was assigned a lot number for QA/QC purposes and recorded on a log of results. Each proposed sample area was identified, sampled and then the area was measured.

Each wipe sample was collected by methodically wiping the entire surface of the selected area with moderate pressure; first in one direction and then in the opposite direction, folding the gauze to reveal fresh material as necessary. Each sample was returned to its centrifuge tube and capped with a screw-cap. The wipe samples were submitted for analysis to Analytical Chemistry Inc. in Tukwila, Washington.

#### **QA/QC Precautions**

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

#### Field Blanks

For QA/QC purposes, and in accordance with State requirements, one field blank was submitted with the sample suite. The field blank was randomly selected from the sampling sequence and included with the samples. To ensure the integrity of the blank, the laboratory was not informed of the presence of a blank and FACTs personnel were unaware, until the actual time of sampling, which specific sample would be submitted as a blank.

#### **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.

Sampling equipment and materials were staged in the second floor hallway.

FACTs personnel donned disposable Tyvek booties prior to entering each of the study areas (each individual room).

#### Collection Rationale

#### **Primary Objective**

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

#### Pre-decontamination sampling

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

For this project, FACT did not have any visual clues to speak to the issue of contamination at the property. Further, since the CSPD ignored our requests for information, FACTs had no law enforcement documents that provided information on the property. Therefore, samples were initially collected based on the presumption that testing was being performed pursuant to the Colorado Real Estate transaction methamphetamine disclosure and testing statute described in CRS §38-35.7-103(2)(a). However, the samples were collected in a manner that if site conditions were not favorable, the samples could be applicable to the sampling requirements of 6CCR1014-3.

# Sample Locations

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

As such, as required by regulation, the Industrial Hygienist selected those areas which had the highest probability of exhibiting the highest concentrations of contamination. Based on our experience, state-of-the-art information on indoor methamphetamine migration patterns and professional judgment, FACTs selected specific locations throughout the structure in an attempt to represent the highest possible concentrations of methamphetamine.

Each selected location was sampled and, due to the convoluted topography of some of the surfaces selected, the surface was measured following the collection of the sample.

Due to the primary need for collection of samples from areas of highest contamination, the surfaces so selected are frequently convoluted and intricate surfaces. As such, the measured delineations are frequently the summation of several specific surface components (see for example the discussion for Functional Space 5).

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.

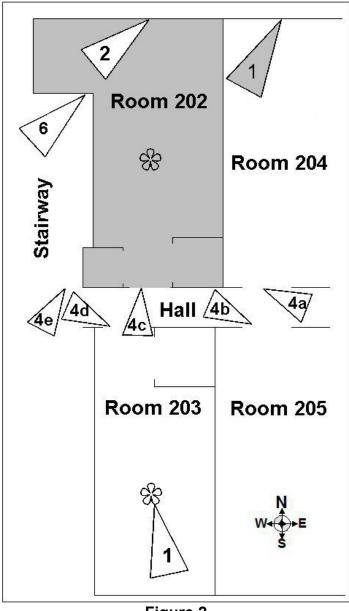


Figure 2
Second Floor Sample Locations

In the above drawing, there are two samples identified as "1" and one of the samples is shaded. During our initial visit to the property on July 27, 2010, a day sleeper was occupying Room 204 and FACTs was not able to collect a sample from that room. On September 9, 2010, FACTs returned to Room 204 and collected Sample RM090910-01 from Room 204 which is designated by the shaded triangle. Room 202 is shaded to indicate the area allegedly identified by law enforcement as the cooking area.

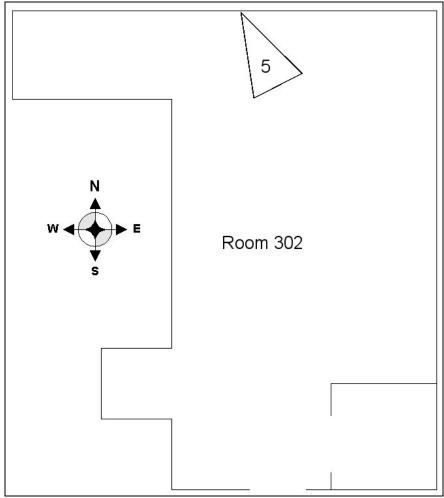


Figure 3
Third Floor Sample Locations

# Sample Results

#### Methamphetamine

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

Sample ID	Location	Area cm2	Mass µg	Result µg/100cm2	Decision Threshold	Status
RM072710-01	Room 203 Ceiling fan blades	582	1.47	0.25	0.50	PASS
RM072710-02	Room 202 Curtain Track on NW wall	503	56.30	11.2	0.50	FAIL
RM072710-03	Field Blank	NA	0.03	< 0.03	0.03	PASS
RM072710-04	Room 200 common hall	632	1.40	0.22	0.50	PASS
RM072710-05	Room 302 Curtain Track on NW wall	503	16.00	3.2	0.50	FAIL
RM072710-06	West Stairwell	523	0.10	0.02	0.50	PASS
RM090910-01	Room 204 top of curtain rail	503	3.17	0.63	0.50	FAIL
RM090910-02	Field Blank	NA	0.00	< 0.03	0.03	PASS

The "<" symbol indicates "Less than" and 0.03 is the limit of quantification.

# Table 3 Sample Results

#### **Wipe Sample Results**

The samples confirm noncompliant concentrations of methamphetamine in the following areas:

Room 202

Room 204

Room 302

Therefore, each of these rooms must be remediated.

# **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 1 (July 27, 2010)

MDL was 0.004  $\mu$ g; LOQ was 0.03  $\mu$ g; MBX <MDL; LCS 0.1  $\mu$ g (RPD 8%, recovery =108%); Matrix spike 0.020  $\mu$ g (RPD 22%; recovery 80%); Matrix spike Dup 0.020  $\mu$ g; (RPD 10%; recovery 90%); Surrogate recovery: High 109% (Samples 2,3 and 5), Low 102% (Sample 6); FACTs reagents: MeOH lot #A0901 <MDL for n=18; Gauze lot G1004 <MDL for n=15. The QA/QC indicate the data met the data quality objectives; and the results appear to exhibit positive bias (the samples may contain slightly less methamphetamine than reported).

#### Data Set 2 (September 9, 2010)

MDL was 0.004  $\mu$ g; LOQ was 0.03  $\mu$ g; MBX <MDL; LCS 2  $\mu$ g (RPD 4%, recovery =104%); Matrix spike 0.020  $\mu$ g (RPD 16%; recovery 85%); Matrix spike Dup 0.020  $\mu$ g; (RPD <1%; recovery 100%); Surrogate recovery: High 101% (Sample 1), Low 103% (Sample 2); FACTs reagents: MeOH lot #A1001 <MDL for n=6; Gauze lot G1004 <MDL for n=16. The QA/QC indicate the data met the data quality objectives; and the results appear to exhibit positive bias (the samples may contain slightly less than reported).

#### 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 methamphetamine contamination at concentrations greater than compliant levels exists at isolated rooms in the hotel structure.

Based on our objective sampling results and subjective observations, we conclude that a "Red-P" pseudoephedrine reduction method of production probably occurred in Room 202.

Based on our observations, Room 202, Room 204 and Room 302 and the entire contents thereof must be decontaminated pursuant to State regulations.

Based on our experience, it may be impossible to economically decontaminate the air-conditioning and heating units in each room, and the systems may have to be removed and replaced. We have included alternative options in the accompanying scope of work.

#### RECOMMENDATION

# Suggested Scope of Work

1. Room 202 and 204: To ensure guests are not alarmed and to allow sufficient room for the decontamination contractor, the Hallway in front of Rooms 202/204/205/206 should be isolated with an opaque plastic barrier constructed across the entire hallway. Access to the remaining rooms is from either of the two open stairways. The entrance of the plastic barrier should bear a sign stating:

#### UNDER CONSTRUCTION – Excuse Our Dust! No Entry Authorized Construction Personnel Only

2. Room 302: A critical barrier chambered airlock may be constructed directly at the door of Room 302, or the hallway may be blocked off in a manner described

- above for Rooms 202/204. The Hotel Management should consider alternative proposals (if any) suggested by the remediation company.
- Decontamination personnel should conduct all suiting, donning and doffing of respirators, and other transloading activities within the privacy of the isolated hallway.
- 4. The contamination reduction corridor and decon can be established in the privacy of the isolated hallway.
- 5. During cleaning activities, negative pressure shall be established in each room to be decontaminated by the installation of a 2,000 cfm negative pressure machine. Active cleaning should not take place except during the operational hours of the negative air machine.
- 6. The negative air machines should only operate from 9 a.m. until 10 p.m. each day.
- 7. Outside of the operational hours, the bathroom vents and exterior of each room entry shall be sealed with a poly critical barrier.
- 8. Exhaust from the negative air machine should be to an outside window, or within the privacy of the isolated hallway.
- 9. After cleaning activities are completed in each room, the bathroom exhaust vents shall be sealed with a critical barrier and the negative air machine can be removed, and the entrance door to each room sealed with a critical barrier pending final verification sampling.
- 10. All transloading of waste and debris should be coordinated with Hotel Management to select a time when the transloading can be conducted with minimal disturbance to the guests.
- 11. A secure on-site storage container should be established on the grounds (such as a poly lined and covered roll on—roll off container or temporary trailer).
- 12. The on-site container shall be secured with a padlock at all times when not immediately manned by remediation personnel.
- 13. Mattresses and furniture that are slated for disposal shall be damaged in such a manner as to prevent future use mattresses shall be sliced open on both sides and otherwise damaged.
- 14. All work performed at the structure should be conducted by an experienced contractor whose employees are documented to have been properly trained in accordance with 29 CFR §1910.120.

- 15. We recommend the decontamination process be conducted in a minimum of Level C PPE ensembles with a minimum of half-face APRs or PAPRs.
- 16. All work performed at the subject property should be conducted with open communication and cooperation with the Colorado Springs Police Department.
- 17. Discovery of any controlled substances shall be immediately reported to the Colorado Springs Police Department.
- 18. Once negative pressure has been established, carefully bag and remove all clothing, debris and other personal items from the property.
- 19. The microwave ovens, refrigerators, coffee makers, TVs, telephones and all other hard surfaced appliances can be economically salvaged by thoroughly wiping down the surfaces.
- 20. Window coverings (window blinds) should be discarded.
- 21. Window draperies can be laundered in a controlled off site laundry designed for the decontamination of hazardous materials, if one is available. Otherwise, the draperies should be discarded.
- 22. 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.
- 23. All bathroom exhaust vents shall be removed and wiped and reinstalled.
- 24. The carpeting can be adequately decontaminated and 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. Otherwise, the carpeting and associated padding should be removed and discarded.
- 25. Following the removal of interior contents, <u>all</u> surfaces in the rooms identified including all ceilings, all hanging fixtures, all cabinets (interior and exterior surfaces), all shelving, all floors, doors, hinges, bathtubs, sinks, appliances (interior and exterior surfaces), and every other interior surface whether specifically mentioned or not, shall be thoroughly wiped down to remove residual contamination.

<sup>&</sup>lt;sup>11</sup> For example, see ASTM Method D 5756-02



- 26. The individual HVAC systems in each room may be difficult to decontaminate. The contractor should propose a cleaning technique. Each HVAC unit allowed to remain in the room shall be subject to final verification cleaning.
- 27. Contractors should be contractually obligated to cover industrial hygiene costs of return visits and sample expenses as a result of a failed final clearance.
- 28. Following the decontamination process, and prior to the final clearance sampling by the Industrial Hygienist, the remediation contractor/subcontractor should be contractually obligated to collect a minimum of one QA/QC wipe sample from each room as part of their own QA program, and submit those samples for methamphetamine analysis. The contractor should 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.
- 29. If the contractor's QA/QC samples suggest that contamination in the subject property remains at a concentration in excess of 0.25 µg/100 cm<sup>2</sup>, the contractor should be contractually obligated to continue to clean, and sample, until the elevated concentrations are not observed.
- 30. Once the contractor's samples indicate the contamination has been sufficiently reduced, FACTs should perform final clearance sampling.
- 31. Any fabrics remaining shall be subject to final clearance.
  - 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.

Enclosures: One CD; Data package, and Appendices

# **APPENDIX A:**

# **SUPPORTING DOCUMENTS**



# FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC. CLANDESTINE METHAMPHETAMINE LABORATORY ASSESSMENT FIELD FORMS<sup>©</sup>

FACTs project name: Razorback		Form # ML1	
Date: September 18, 2010			
Reporting IH:	Caoimhín P. Connell, Forensic IH		

#### **PROPERTY DESCRIPTION:**

Physical address	Room 202, 8350 Razorback Road, Colorado Springs, CO 80920			
Legal description or VIN	Lot 2, Town North Centre Subdivision Filing Number 5, Colorado Springs			
Registered Property Owner	Zions First National Bank 1 South Main St, Suite 700 Salt Lake City UT 84133-1109			
Number of structures	One			
	1:Primary Structure	22,381	Square feet	
	2:Room 202	509	Square feet	
Type of Structures	3:Room 203	324	Square feet	
(Each affected structure will need a	4:Room 204	324	Square feet	
"Functional Space"	5:Room 302	466	Square feet	
inventory)	6: Hallway	90	Square feet	
	7: Stairwell	216	Square feet	
	Total Impacted Area	1,929	Square feet	
	1: South: Street front			
Adjacent and/	2: North: Street front and o	pen field		
or surrounding properties	3: West: Fast food restaura	int		
	4: East: Fast food restaurant			
General Property Observations	Hotel property maintained in good condition			
Presumed Production Method	Red-P pseudoephedrine reduction			

#### PLUMBING INSPECTION AND INVENTORY

FACTs project name: Razorback		Form # ML2
Date:		
Reporting IH:	Caoimhín P. Connell, Forensic IH	

Functional Space	Room	Fixture	Indicia?	Comments
1	Room 202	Shower	N	
1	Room 202	Sink 1	N	
1	Room 202	Sink 1	N	
1	Room 202	Jacuzzi	N	
1	Room 202	Toilet	Ν	
4	Room 302	Shower	N	
4	Room 302	Sink 1	N	
4	Room 302	Sink 2	N	
4	Room 302	Jacuzzi	N	
4	Room 302	Toilet	N	No Comments
2	Room 203	Toilet	N	
2	Room 203	Sink	N	
2	Room 203	Bath	N	
2	Room 203	Shower	N	
3	Room 204	Toilet	Z	
3	Room 204	Sink	N	
3	Room 204	Bath	N	
3	Room 204	Shower	N	
3	Room 204	Toilet	N	

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

Item	Y/N	Indicia ?	Sampled ?	Comments
Isolated AHU?	Υ			No Comment
Common air intake?	Υ			No Comment
Common bathroom exhausts?	-			The exhaust patterns are unknown
Forced air system?	Υ			No Comment
Steam heat?	N			No Comment
Common ducts to other properties?	N	No	No	No Comment
Passive plena to other properties?	N	INU	INO	Passive migration through plena
Active returns to other properties?	-			No Comment
Passive wall grilles to other properties?	Υ			Passive fugitive migration
Industrial ventilation?	Υ			No Comment
Residential ventilation?	Υ			No Comment
Pressurized structure?	N			No Comment

#### **FUNCTIONAL SPACE INVENTORY**

FACTs project name: Razorback		Form # ML3	
Date: September 18, 2010			
Reporting IH:	Caoimhín P. Connell, Forensic IH		

Structure Number	Functional Space Number	Indici a (Y/N)	Describe the functional space (See drawings for delineating structural features )
1	1	Υ	Room 202
1	2	Υ	Room 203
1	3	Y	Room 204
1	4	Υ	Room 302
1	5	Y	Second floor hallway
1	6	Υ	West stair well connecting 2nd and 3rd floors

#### **LAW ENFORCEMENT DOCUMENTATION**

FACTs project name: Razorback		Form # ML4	
Date: September 18, 2010			
Reporting IH:	Caoimhín P. Connell, Forensic IH		

Inventory of Reviewed Documents	1: No response from CSPD
Described method(s) of production	Presumed Red-P pseudoephedrine reduction
Chemicals identified by the LEA as being present	Unknown
Cooking areas identified	Room 202
Chemical storage areas identified	Room 202
LE Observation on areas of contamination or waste disposal	Unknown



#### FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

July 21, 2010

Sgt. Harrell Vice and Narcotics Colorado Springs Police Department 705 S Nevada Avenue Colorado Springs, CO 80903

Via Fax: 719-578-6064

Dear Sgt. Harrell:

Forensic Applications, Inc. has been contracted to perform a "Preliminary Assessment" an illegal drug laboratory 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 City of Colorado Springs at:

#### Room 202, 8350 Razorback Road, Colorado Springs, CO

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

We would like contact information for any Law Enforcement personnel who may be familiar with the law enforcement actions that occurred on September 29, 2001 and review any narratives, inventories and evidence sheets regarding the action, and any other subsequent dates for any other locations on the hotel structure involving controlled substances.

We are only interested in issues involving controlled substances. If no such records are available please let us know and we will merely make that notation in our report to the Governing Body.

We will be performing the on-site assessment on July 26, 2010, and will need to review any available documents before then. We apologize for the short notice, however, we generally do not have any control over the timeframes involved.

Forensic Applications takes extreme caution to protect all Law Enforcement Sensitive information. When requested by the Law Enforcement Agency, we do not reveal names, document identities, or include any information considered sensitive by an investigating agency. We have developed a close working relationship with other Colorado Law Enforcement Agencies, and we value and respect that open line of communication. Please feel free to call me directly with any comments or questions. Please advise us of any fees associated with our request.

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

Sincerely,

Caoimhín P. Connell Forensic Industrial Hygienist

CC: "Tony" CSPD Records and ID Via Fax: 719-632-1663



#### FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

July 21, 2010

Sheriff Terry Maketa El Paso County Sheriff's Office Law Enforcement Bureau 101 West Costilla Street Colorado Springs, CO. 80903

Via Fax: 1-719-520-7255

Dear Sheriff Maketa:

Forensic Applications, Inc. has been contracted to perform a "Preliminary Assessment" of an illegal drug laboratory 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 City of Colorado Springs at:

#### Room 202, 8350 Razorback Road, Colorado Springs, CO

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

We would like contact information for any Law Enforcement personnel who may be familiar with the law enforcement actions that occurred on September 29, 2001 and review any narratives, inventories and evidence sheets regarding the action, and any other subsequent dates for any other locations on the hotel structure involving controlled substances.

We are only interested in issues involving controlled substances. If no such records are available please let us know and we will merely make that notation in our report to the Governing Body.

We will be performing the on-site assessment on July 26, 2010, and will need to review any available documents before then. We apologize for the short notice, however, we generally do not have any control over the timeframes involved.

Forensic Applications takes extreme caution to protect all Law Enforcement Sensitive information. When requested by the Law Enforcement Agency, we do not reveal names, document identities, or include any information considered sensitive by an investigating agency. We have developed a close working relationship with your office over the last several years, and we value and respect that open line of communication. Please feel free to call me directly with any comments or questions. Please advise us of any fees associated with our request.

<u>Pursuant to CRS §24-72-305.5, I affirm that upon receipt of requested records of official actions and/or criminal justice records from the El Paso County Sheriff's Office, such records shall not be used for the direct solicitation of business for pecuniary gain.</u>

Sincerely,

Caoimhín P. Connell Forensic Industrial Hygienist

CC: CSPD Records CCPD V&N Dear Caoimhín P. Connell,

#### Re: Room 202, 8350 Razorback Road, Colorado Springs, CO

The 3 page fax you sent through eFax.com to 17195786064 was successfully transmitted at 2010-07-21 15:13:13 (GMT).

The length of transmission was 150 seconds.

The receiving machine's fax ID: 719578 6064.

Best Regards,

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

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Dear Caoimhín P. Connell,

#### Re: Room 202, 8350 Razorback Road, Colorado Springs, CO

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Email: help@mail.efax.com

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Dear Caoimhín P. Connell,

#### Re: Room 202, 8350 Razorback Road, Colorado Springs, CO

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Best Regards,

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Email: help@mail.efax.com

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#### **FIELD OBSERVATIONS**

FACTs project name: Razorback		Form # ML5
Date: September 18, 2010		
Reporting IH:	Caoimhín P. Connell, Forensic IH	

Indicator	Functional Space	Indicator	Functional Space
(Pseudo)ephedrine	No Comment	Lithium	No Comment
Acids	No Comment	Marijuana	No Comment
Aerosol cans	No Comment	Match components	No Comment
Alcohols (MeOH, EtOH)	No Comment	Mercury	No Comment
Ammonia	No Comment	Methamphetamine	1,2,3,4,5,6
Ammunition	No Comment	Modified coolers	No Comment
Artistic expressions	No Comment	Modified electrical	No Comment
Bases	No Comment	Modified structural	No Comment
Basters/Pipettes	No Comment	Modified ventilation	No Comment
Batteries	No Comment	Needles/Syringes	No Comment
Bi-phasic wastes	No Comment	OTC Containers	No Comment
Booby traps	No Comment	OTC drugs	No Comment
Bullet holes	No Comment	pH papers/indicators	No Comment
Burn marks	No Comment	Phenyl-2-propanone	No Comment
Chemical storage	No Comment	Pornography, Sex toys	No Comment
Colored wastes	No Comment	Prescription drugs	No Comment
Corrosion on surfaces	No Comment	Presence of cats	No Comment
Delaminating paint	No Comment	Red P	No Comment
Drug paraphernalia	No Comment	Red Staining	Not Observed
Electrical modifications	No Comment	Salt or Salters	No Comment
Feces	No Comment	Security devices	No Comment
Filters	No Comment	Signs of violence	No Comment
Forced entry marks	No Comment	Smoke detectors disabled	No Comment
Gang markings	No Comment	Solvents (organic)	No Comment
Gas cylinders	No Comment	Squalor	No Comment
Gerry cans	No Comment	Staining on floors	No Comment
Glassware	No Comment	Staining on walls or ceiling	No Comment
Graffiti	No Comment	Stash holes	No Comment
Heating mantle	No Comment	Structural damage	No Comment
Heet or similar	No Comment	Tubing	No Comment
Hydrogen peroxide	No Comment	Urine containers	No Comment
lodine	Not Observed	Weapons	No Comment
Kitty litter	No Comment	Window block material	No Comment
Lead	No Comment	Yellow staining	Not Observed

#### Notes

- ① Present but not as indicia
- ② Copious or unusual quantities③ Present in normal household expectations
- Modified in manner consistent with clanlab use



CONTAMINANT MIGRATION OBSERVATIONS	
FACTs project name: Razorback	Form # ML6
Date: September 18, 2010	

Caoimhín P. Connell, Forensic IH Reporting IH: Describe/identify adjacent areas where contaminants may have migrated. See body of report Each grid equals approximately \_\_\_\_\_ (Approximate lay-out; Not to scale) Describe the area:



#### INDIVIDUAL SEWAGE DISPOSAL SYSTEM FIELD FORM

FACTs project name: Razorback		Form # ML7
Date: September 18, 201	0	
Reporting IH:	Caoimhín P. Connell, Forensic IH	

Is there unusual staining around internal drains  Are solvent odors present from the internal drains  Is there evidence of wastes being disposed down internal drains  Are solvent odors present from the external sewer drain stacks  Was the septic tank lid(s) accessible  Was the leach field line accessible  Was the septic tank or leach field lines opened  Are solvent odors present from the leach field lines (if "yes" see below)  Are solvent odors present from the septic tank (if "yes" see below)  Is "slick" present in the septic tank  Are biphasic (aqueous-organic) layers present in the septic tank  Was pH measured in the septic tank (pH =7 to 8)		Yes	No	N/C
Are solvent odors present from the internal drains  Is there evidence of wastes being disposed down internal drains  Are solvent odors present from the external sewer drain stacks  Was the septic tank lid(s) accessible  Was the leach field line accessible  Was the septic tank or leach field lines opened  Are solvent odors present from the leach field lines (if "yes" see below)  Are solvent odors present from the septic tank (if "yes" see below)  Is "slick" present in the septic tank  Are biphasic (aqueous-organic) layers present in the septic tank  Was pH measured in the septic tank (pH =7 to 8)	Does the property have an ISDS		Х	
Is there evidence of wastes being disposed down internal drains  Are solvent odors present from the external sewer drain stacks  Was the septic tank lid(s) accessible  Was the leach field line accessible  Was the septic tank or leach field lines opened  Are solvent odors present from the leach field lines (if "yes" see below)  Are solvent odors present from the septic tank (if "yes" see below)  Is "slick" present in the septic tank  Are biphasic (aqueous-organic) layers present in the septic tank  Was pH measured in the septic tank (pH =7 to 8)	Is there unusual staining around internal drains		Х	
Are solvent odors present from the external sewer drain stacks  Was the septic tank lid(s) accessible  Was the leach field line accessible  Was the septic tank or leach field lines opened  Are solvent odors present from the leach field lines (if "yes" see below)  Are solvent odors present from the septic tank (if "yes" see below)  Is "slick" present in the septic tank  Are biphasic (aqueous-organic) layers present in the septic tank  Was pH measured in the septic tank (pH =7 to 8)	Are solvent odors present from the internal drains		Х	
Was the septic tank lid(s) accessible  Was the leach field line accessible  Was the septic tank or leach field lines opened  Are solvent odors present from the leach field lines (if "yes" see below)  Are solvent odors present from the septic tank (if "yes" see below)  Is "slick" present in the septic tank  Are biphasic (aqueous-organic) layers present in the septic tank  Was pH measured in the septic tank (pH =7 to 8)	Is there evidence of wastes being disposed down internal drains		Х	
Was the leach field line accessible  Was the septic tank or leach field lines opened  Are solvent odors present from the leach field lines (if "yes" see below)  Are solvent odors present from the septic tank (if "yes" see below)  Is "slick" present in the septic tank  Are biphasic (aqueous-organic) layers present in the septic tank  Was pH measured in the septic tank (pH =7 to 8)	Are solvent odors present from the external sewer drain stacks			Х
Was the septic tank <u>or</u> leach field lines opened  Are solvent odors present from the leach field lines (if "yes" see below)  Are solvent odors present from the septic tank (if "yes" see below)  Is "slick" present in the septic tank  Are biphasic (aqueous-organic) layers present in the septic tank  Was pH measured in the septic tank (pH =7 to 8)	Was the septic tank lid(s) accessible			
Are solvent odors present from the leach field lines (if "yes" see below)  Are solvent odors present from the septic tank (if "yes" see below)  Is "slick" present in the septic tank  Are biphasic (aqueous-organic) layers present in the septic tank  Was pH measured in the septic tank (pH =7 to 8)	Was the leach field line accessible			
Are solvent odors present from the septic tank (if "yes" see below)  Is "slick" present in the septic tank  Are biphasic (aqueous-organic) layers present in the septic tank  Was pH measured in the septic tank (pH =7 to 8)	Was the septic tank <u>or</u> leach field lines opened			
Is "slick" present in the septic tank  Are biphasic (aqueous-organic) layers present in the septic tank  Was pH measured in the septic tank (pH =7 to 8)  Applicable:  City Sewer	Are solvent odors present from the leach field lines (if "yes" see below)			
Are biphasic (aqueous-organic) layers present in the septic tank  Was pH measured in the septic tank (pH =7 to 8)  City Sewer	Are solvent odors present from the septic tank (if "yes" see below)		Not	
Was pH measured in the septic tank (pH =7 to 8)	Is "slick" present in the septic tank	A	pplicat	ole:
	Are biphasic (aqueous-organic) layers present in the septic tank	tic tank City Sewer		ver
Were organic vapors measured in the septic tank (if "yes" see below)	Was pH measured in the septic tank (pH =7 to 8)			
	Were organic vapors measured in the septic tank (if "yes" see below)			
Is sampling of the ISDS warranted	Is sampling of the ISDS warranted			
Were calawasi/drum thief samples collected from the septic tank	Were calawasi/drum thief samples collected from the septic tank			

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

**Qualitative Organic Vapor Monitoring** 

Hydrocarbon detector model	EnMet Target Series, MOS detector
XXX	Xxx

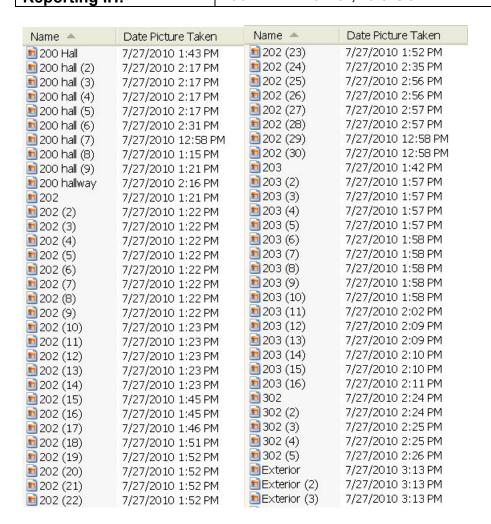
Location	MOS*	PID*	FID*
All internal drains	<1 ppm	XXX	Xxx
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Xxx	Xxx	Xxx
Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	Xxx	Xxx	Xxx
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXX	XXX	XXX

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

Notes			

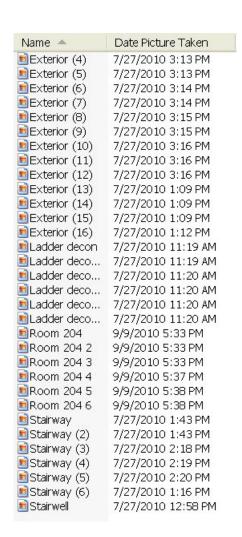
#### PRE-REMEDIATION PHOTOGRAPH LOG SHEET

FACTs project name: Razorback		Form # ML8	
Date: September 18, 2010			
Reporting IH:	Caoimhín P. Connell, Forer	Caoimhín P. Connell, Forensic IH	



## PRE-REMEDIATION PHOTOGRAPH LOG SHEET

FACTs project name: Raz	orback	Form # ML8				
Date: September 18, 2010						
Reporting IH:	Caoimhín P. Connell, Forensi	c IH				



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## CERTIFICATION, VARIATIONS AND SIGNATURE SHEET

FACTs project name: Raz	orback	Form # ML14				
Date: September 18, 2010						
Reporting IH:	Caoimhín P. Connell, Forensi	c 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.  I do hereby certify that I conducted post-decontamination clearance sampling in accordance with 6 CCR 1014-3, §6.  I do hereby certify that the cleanup standards established by 6 CCR	xxxxxxxxxxxxx			
1014-3, § 7 have been met as evidenced by testing I conducted.	0 . 10 . 11			
I do hereby certify that the analytical results reported here are faithfully reproduced.	Cantel Cont			

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

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

Zelland

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: September 18, 2010



## 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:	Razorback	Form # ML15			
Date Sept. 18, 2010					
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. He has been a practicing Industrial Hygienist in the State of Colorado since 1987; and he is the contract Industrial Hygienist for the National Center for Atmospheric Research and has been involved in clandestine drug lab (including meth-lab) investigations since 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 over 200 hours of methlab training for officers of over 25 Colorado Police agencies, 20 Sheriff's Offices, federal agents, and probation and parole officers 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.

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

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

Mr. Connell is 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 190 assessments in illegal drug labs, and collected over 1,700 samples during assessments (a detailed list of drug lab experience is available on the web at: <a href="http://forensic-applications.com/meth/DrugLabExperience2.pdf">http://forensic-applications.com/meth/DrugLabExperience2.pdf</a>

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

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

## APPENDIX B

## **ANALYTICAL REPORTS FOR FACTS SAMPLES**

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

Website: www.acilabs.com

Phone: 206-622-8353 E-mail: info@acilabs.com

Lab Reference:	10145-06	
Date Received:	August 2, 2010	
Date Completed:	August 3, 2010	

August 4, 2010

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

CLIENT REF: Razorback

SAMPLES: wipes/6

ANALYSIS: Methamphetamine by Gas Chromatography-Mass Spectrometry.

**RESULTS:** in total micrograms (ug)

Sample	Methamphetamine, ug	% Surrogate Recovery
RM072710-01	1.47	108
RM072710-02	56.3	109
RM072710-03	< 0.030	109
RM072710-04	1.40	108
RM072710-05	16.0	109
RM072710-06	0.101	102
QA/QC Method Blank	< 0.004	
QC 0.100 ug Standard	0.108	1
QA 0.020 ug Matrix Spike	0.016	
QA 0.020 ug Matrix Spike Duplicate	0.018	
Method Detection Limit (MDL)	0.004	
Practical Quantitation Limit (PQL)	0.030	

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

Robert M. Orheim

**Director of Laboratories** 

## HANALYTICAL CHEMISTRY INC.

## CDL SAMPLING & CUSTODY

PROJECT Name/No: Razorback SAMPLING DATE: SAMPLER NAME: | Caoimhín P. Connell Number Caoimhín P. Connell LAB PRINT NAME eMail: 4611 S 134th Pl, Ste 200 Tukwila WA 98168-3240 CHAIN OF CUSTODY RECORD Website: www.acilabs.com cpconnell@forensic-applications.com RM072710-07 Sample Number RM072710-08 RMØ7271Ø-Ø6 RMØ7271Ø-Ø5 RM072710-10 RM072710-09 RMØ7271Ø-Ø4 RMØ7271Ø-Ø3 RMØ7271Ø-Ø2 RMØ7271Ø-Ø1 July 27,2010 Signature FACTs, Inc. COMPANY Wipe REPORT TO: | Caoimhín P. Connell ADDRESS: COMPANY: Wipes Results in: PHONE SAMPLE MATRIX Vacuum Phone: 206-622-8353 FAX: 206-622-4623 303-903-7494 Forensic Applications, Inc. 28/2018 185 Bounty Hunters Lane, Bailey, CO 80421 DATE Other □ µg/100cm<sup>2</sup> 12:30 TIME × \* × × × × × × × × ANALYSIS REQUESTS × × × 0 × × × × × × Please do not write in shaded areas × **Turnaround Time** S 2 Days (1.75X) 24 Hours (2X) 3 Days (1.5X) Routine X Total µg 4 5 6 Custody Seals: Temperature: COMMENTS Inspected By: Container: Lab File No. SAMPLER wN 5 4 Total Number of Container
(verified by laboratory) ANALYSIS REQ Use entire content Methamphetamine Not Submitted Page Ambient COMMI NA Intact Yes 101

## SAMPLING FIELD FORM

FACTs project name: Razorback	Form # ML17
Date: July 27, 2010	Alcohol Lot#: A1Ø9Ø1 Gauze Lot#: G1ØØ4
Reporting IH: Caoimhín P. Connell, Forensic IH	Preliminary X Intermediate Final

Sample ID RMØ7271Ø-	Туре	Location	Funct. Space	Dimensions	Substrate
-Ø1	W	Room 203 – ceiling fan blades	5	See note 1	VW
-Ø2	W	Room 202 – curtain rail on North wall	1	104" X 0.75"	M
-Ø3	W	BX	NA	NA	NA
-Ø4	W	Room 200 Common hallway, tops of five door jambs	2	See note 2	M
-Ø5	W	Room 302 – curtain rail on North wall	4	104" X 0.75"	M
-Ø6	W	West stairway, north wall	3	9"X9"	PDW

Sample 1	Types:	W=Wipe;	V=Microvacuum;	; A=Air; B=Bulk;	L=liquid		
0	- D\A/	D	D D = ! - 41. \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	/!	4 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	NA NA-1-1 C	

Surfaces: DW= Drywall, P=Painted; W= Wood, L= Laminated, V= Varnished, M= Metal, C=Ceramic, PI=Plastic

Note 1: Trapezoidal blade equivalent consisted of b2= 6.5", b1=4.75", h=15.57				
Note 2: (39.5"X0.5")X5				

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

Website: www.acilabs.com

Phone: 206-622-8353 E-mail: info@acilabs.com

Lab Reference:	10155-10
Date Received:	September 13, 2010
Date Completed:	September 15, 2010

September 15, 2010

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

CLIENT REF: Razorback

SAMPLES: wipes/2

ANALYSIS: Methamphetamine by Gas Chromatography-Mass Spectrometry.

**RESULTS:** in total micrograms (ug)

Sample	Methamphetamine, ug	% Surrogate Recovery
RM090910-01	3.17	108
RM090910-02	< 0.030	103
QA/QC Method Blank	< 0.004	
QC 2.00 ug Standard	2.09	
QA 0.020 ug Matrix Spike	0.017	
QA 0.020 ug Matrix Spike Duplicate	0.020	
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

# THANALYTICAL CHEMISTRY INC.

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

Phone: 206-622-8353

# CDL SAMPLING & CUSTODY FORM

Page

of

PROJECT Name/No: RAZORBACK SAMPLING DATE: 9 10, 2010 SAMPLER NAME: | Caoimhín P. Connell Number Caoimhín P. Connell LAB MIA SAZON PRINT NAME eMail: CHAIN OF CUSTODY RECORD RM090910-01 Website: www.acilabs.com Fiosrach@aol.com Sample Number Signature FACTs, Inc. COMPANY Wipe X REPORT TO: COMPANY: ADDRESS: PHONE Wipes Results in: SAMPLE MATRIX Vacuum FAX: 206-622-4623 9110/2010 1500 9/13/10 Caoimhín P. Connell 185 Bounty Hunters Lane, Bailey, CO 80421 Forensic Applications, Inc. 303-903-7494 DATE Other □ μg/100cm<sup>2</sup> 1430 TIME 1 2 ANALYSIS REQUESTS Please do not write ☐ 2 Days (1.75X) ☐ 24 Hours (2X) × S **Turnaround Time** 3 Days (1.5X) Routine X Total µg 5 6 Custody Seals: Temperature: COMMENTS Inspected By: Container: in shaded areas Lab File No. SAMPLER ω **Total Number of Containers** ANALYSIS REQUESTED Methamphetamine Normal Turn-around time Not Submitted RUSH Use entire contents (verified by laboratory) COMMENTS Ambient MIA SAZON Intact Yes Cooled Broken No No. N

## SAMPLING FIELD FORM

FACTs project name: Razorback	Form # ML17
Date: September 9, 2010	Alcohol Lot#: A1ØØ1 Gauze Lot#: G1ØØ4
Reporting IH: Caoimhín P. Connell, Forensic IH	Preliminary X Intermediate Final

Sample ID RMØ9Ø91Ø	Туре	Location	Funct. Space	Dimensions	Substrate
-Ø1	W	Room 204 top of curtain rail	3		M
-Ø2	W	BX	NA		NA

Surfaces: DW= Drywall, P=Painted; W= Wood, L= Laminated, V= Varnished, M= Metal, C=Ceramic, Pl=Plastic							
	•						

## **APPENDIX C**

## COMPACT DIGITAL DISK (PHOTOGRAPHS AND ADDITIONAL DOCUMENTATION)