FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

Preliminary Assessment of an Identified Illegal Drug Laboratory at 1314 West Kiowa Street Colorado Springs, CO 80904-3946

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EXECUTIVE SUMMARY

Sometime during 2002, on an unavailable date, personnel from Colorado Springs Police Department (and possibly other agencies), seized an illegal drug laboratory in at 1314 West Kiowa Street in Colorado Springs, Colorado (the subject property).

In the early part of 2010, the property mortgage holder, Aventa Credit Union, received the property through a defaulted loan. In April of 2010, Forensic Applications Consulting Technologies, Inc. (FACTs) was contracted to perform a standard Preliminary Assessment (PA) at the subject property. On April 27, 2010, personnel from FACTs performed a State mandated PA pursuant to Colorado Regulation 6 CCR 1014-43, Part 4.

Samples taken during the PA conclusively demonstrated the presence of methamphetamine contamination and, pursuant to Colorado Revised Statutes, CRS §16-13-103, the residence and all remaining personal items therein meet the definition of an "illegal drug laboratory." Based on the totality of the circumstances, FACTs makes the following observations:

- The property exhibits overt noncompliance with Colorado's methamphetamine cleanup standards.

- "Discovery" and "Notification" existed by virtue of the FACTs April 27, 2010 samples: the results of which FACTs was made aware and verbally reported to the Registered Owner on May 3, 2010.

- A noncompliant illegal drug lab, as that term is defined in CRS §25-18.5-101, existed at the subject property from 2002 forward, and continues to exist at the time of this report.

- Subjective observations and objective information from confidential law enforcement sources provided *prima fascia* evidence that a methamphetamine *manufacturing* process occurred at the property.

- A Class 1 Public Nuisance, as defined in CRS §16-13-303(1) existed at the subject property from at least May 3, 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 property may occur.

- The PA and sampling was performed by Mr. Caoimhín P. Connell, Forensic Industrial Hygienist with FACTs, who was assisted by Rob Seel and Chris Carty, Field Technicians.[1]

REGULATORY REQUIREMENTS

Federal Requirements

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

State Requirements

Preliminary Assessment

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

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

Discovery and Notification

Discovery and Notification occurred at the subject property by virtue of the verbal May 3, 2010 report of findings to the Registered Owner. An arguable position is also that Discovery and Notification occurred on March 30, 2005 when Regulation 6 CCR 1014-3

[1] Ms. Carty and Mr. Seel 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.

[2] Section 8.26 of 6 CCR 1014-3

[3] Section 4 of 6 CCR 1014-3

became effective, and the occupant, who was aware of the contamination, remained unlawfully in the property.

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

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

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

Initial Statement on Hypothesis Testing

Regarding this subject property, objective sampling performed by FACTs confirmed overt methamphetamine contamination. 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 residence 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:

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

[5] Section 4.6 of 6 CCR 1014-3

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

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 1,837 square foot residence built *circa* 1894. For the purposes of regulatory compliance, traditionally non-taxable spaces (such as the sheds) must be included in the assessment. Therefore, for the purposes of this PA, the approximate total square feet of impacted floor space used in the PA is 4,226 square feet and sampling requirements are based on this value.

Exterior Structures

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 such, we included the exterior Garage, North Shed, and South Shed in the PA.

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

Review of Law Enforcement Documentation

As part of the Preliminary Assessment, FACTs is required by regulation[6] to review available law enforcement documents pertinent to a subject property. During this project, we met considerable reluctance from the Colorado Springs Police Department Records and Identification Division. During a previous PA in 2009 in Colorado Springs, FACTs was explicitly directed to make all requests pursuant to 6 CCR 1014-3 to the V&N Section.[7] Having made our written request to this division for this PA, we were told that the Division was not the correct office and the request had to be made to "Records and ID."

"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 exactly which "State law" was in danger of violation, but FACTs was assured that our request violated State law anyway. We were then told that we would have to re-submit our written request and wait up to six weeks since information had to be "redacted" from the public record by the Records Personnel. When we asked what form "redaction" would

[6] 6 CCR 1014-3 (Section 4.2)

[7] 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)

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.

We pointed out that the rules for obtaining the mandatory information is not in line with State regulations, or other agencies and even keep changing within the Colorado Springs Police Department, and in the past we were able to obtain the mandatory information by merely walking into the Police Department and read the necessary reports. We were informed that whoever had permitted the practice of releasing information to us was in violation of Colorado Springs Police Policy and Procedures.

FACTs has worked with several law enforcement agencies across the state on numerous illegal drug laboratories. Colorado Springs Police Department remains the only agency in the State which does not cooperate with requests for information made pursuant to 6 CCR 1014-3 and appears to adamantly believe that there are some unspecified "State laws" disallowing the release of the information, even when the material is required by State regulations.[8]

It must be said however, that some elements of the Colorado Springs Police Department are more reasonable, and confidential law enforcement sources within the CSPD provided FACTs with some of the information contained in the public domain documents that we needed to perform our assessment, but informed us that we would not be allowed to actually see the documents and we would not be given all the information we needed to meet our regulatory needs.

Governing Body

The individual who informed us that he was the exclusive contact for all records requests also stated that he was the Governing Body. At this point, we do not know who the Governing Body actually is for Colorado Spring, if indeed one has been identified. Therefore, pursuant to CRS §25-18.5-101(2.5) FACTs is making the *de facto* determination that the "Governing Body" for this property is:

Colorado Springs Police Department
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.[9] However, those regulations violated and were contrary to State regulations and State statutes and

[8] Final Verification Sampling and DECISION STATEMENT of an Identified Illegal Drug Laboratory At: 2927 Main Street Colorado Springs, CO, 80907-6013, December 28, 2009 (Public Domain Document prepared by FACTs and held at Colorado Springs Police Department)

[9] Attachment "A" Regulations Of The El Paso County Board Of Health El Paso County, Colorado Chapter 4 *Methamphetamine Laboratory Cleanup Regulations*, March 23, 2005

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 Regulation appears to have been recently withdrawn and 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 Tuesday, April 27, 2010, Mr. Caoimhín P. Connell, Forensic Industrial Hygienist with FACTs, performed a visual inspection of the subject property. During the assessment, Mr. Connell was assisted by Field Technicians Christine Carty and Rob Seel. [10]

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 it did contain residual chattels, trash, personal belongings and some major appliances.

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

SAMPLE COLLECTION

Wipe Samples

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

Each sample location was identified by the Industrial Hygienist and was collected by a field technician under the direct and immediate supervision and instruction of the Industrial Hygienist.

Methamphetamine

Wipe samples were collected in a manner consistent with State regulations. The wipe sample medium was individually wrapped commercially available Safeway™ 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

[10] Ms. Carty and Mr. Seel both 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.

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

For QA/QC purposes, and in accordance with State requirements, one field blank was submitted for every ten wipe samples. The field blanks were randomly selected from the sampling sequence and included with the samples. To ensure the integrity of the blanks, FACTs personnel were unaware, until the actual time of sampling, which specific sample would be submitted as a blank. Since the sample results all indicated noncompliant concentrations of methamphetamine, the remaining blanks were not needed and not submitted.

Cross Contamination

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

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. Any data that disproves the hypothesis, including police records, visual clues of production, storage, or use or documentation of drug paraphernalia being present, is considered conclusive, and leads the consultant to accept the null hypothesis and declare the area non-compliant. The strength of evidence needed to reject the hypothesis is low, and is only that which would lead a reasonable

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

Similarly, there is a misconception that if samples are collected, and the laboratory results are below the value often misinterpreted as the State's regulatory threshold value (0.5 µg/100 cm2), the samples necessarily indicate that the area is not contaminated and no action is required. However, the regulatory threshold values are exclusively to be used as *prima fascia* evidence during final verification activities in the absence of all other information. 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 not require samples to be collected during a Preliminary Assessment, as part of this Preliminary Assessment, samples were collected.

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

For this project, based on *a priori* information, FACTs was confident that contamination was widespread. As such, we deemed it an unwise expenditure of financial resources to analyze samples wherein the sample results were a foregone conclusion.

However, to objectively test the a priori assumption, FACTs selected four samples which would best represent the overall level of contamination throughout the property. These four samples were submitted for analysis under the condition that if the samples demonstrated compliance, the remaining samples would be submitted. If the samples confirmed the suspected overt noncompliance, the remaining samples would be archived for one year at the FACTs offices.

Sample Results

Methamphetamine

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

Sample ID	Location	Sample Result (µg/100cm2)	Decision Threshold	Status
KM042710-1	Parlor East ceiling fan	2.5	0.50	FAIL
KM042710-2	Drawing room ceiling fan	Archived		
KM042710-3	Field Blank			
KM042710-4	Dining room ceiling fan			
KM042710-5	Kitchen Ceiling fan			
KM042710-6	Bathroom top of lighting fixture			
KM042710-7	Field Blank			
KM042710-8	Butler's Bedroom Ceiling fan	7.7	0.50	FAIL
KM042710-9	Field Blank	Archived		
KM042710-10	Stairs down Laundry top of light			
KM042710-11	Downstairs East Rec room top of N shelf			
KM042710-12	Downstairs SW Bedroom top of supply duct	1.6	0.50	FAIL
KM042710-13	Downstairs W Bedroom W wall at graffito	Archived		
KM042710-14	Coal room and storage room top of duct			
KM042710-15	Stairs up ceiling			
KM042710-16	Upstairs Peach room ceiling			
KM042710-17	Upstairs Blue Room ceiling center			
KM042710-18	Upstairs Pink room top of water tank			
KM042710-19	Attic black iron			
KM042710-20	Furnace return in Peach room	5.5	0.50	FAIL
KM042710-21	Storage area under front porch	Archived		
KM042710-22	Coach house mud room shelf			
KM042710-23	Coach house garage top of light fixture			
KM042710-24	Shed south light fixture			
KM042710-25	Shed North top of center metal beam			

Table 2
Results of Preliminary Methamphetamine Wipe Samples

Wipe Sample Results

The samples confirm widespread noncompliant concentrations of methamphetamine to within a very strong degree of confidence. Overall, the sample results were a little unusual in that the sample results are very similar. Although there were only four samples submitted for analysis, the uniformity of the results weakly suggest a Gaussian distribution instead of the normally expected lognormal distribution. However, since only four samples were submitted, the uniformity of the results is only weakly supported, and concentrations two orders of magnitude greater than reported here remain possible for the structure.

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 µg; LOQ was 0.03 µg; MBX <MDL; LCS 4 µg (RPD <1%, recovery =100%); Matrix spike 0.020 µg (RPD 5%; recovery 105%); Matrix spike Dup 0.020 µg;

(RPD 10%; recovery 110%); Surrogate recovery: High 107% (Sample 6), Low 98% (Sample 8); FACTs reagents: MeOH lot #A0901 <MDL for n=8; Gauze lot G1002 <MDL for n=5. 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).

Sample Locations

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

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

Each sample area was then delineated with a measured outline, or in some cases, it was impossible to pre-measure the limits of the sample, and the sample was collected first and then the area was measured.

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.

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 indicated by triangles were collected during the PA.

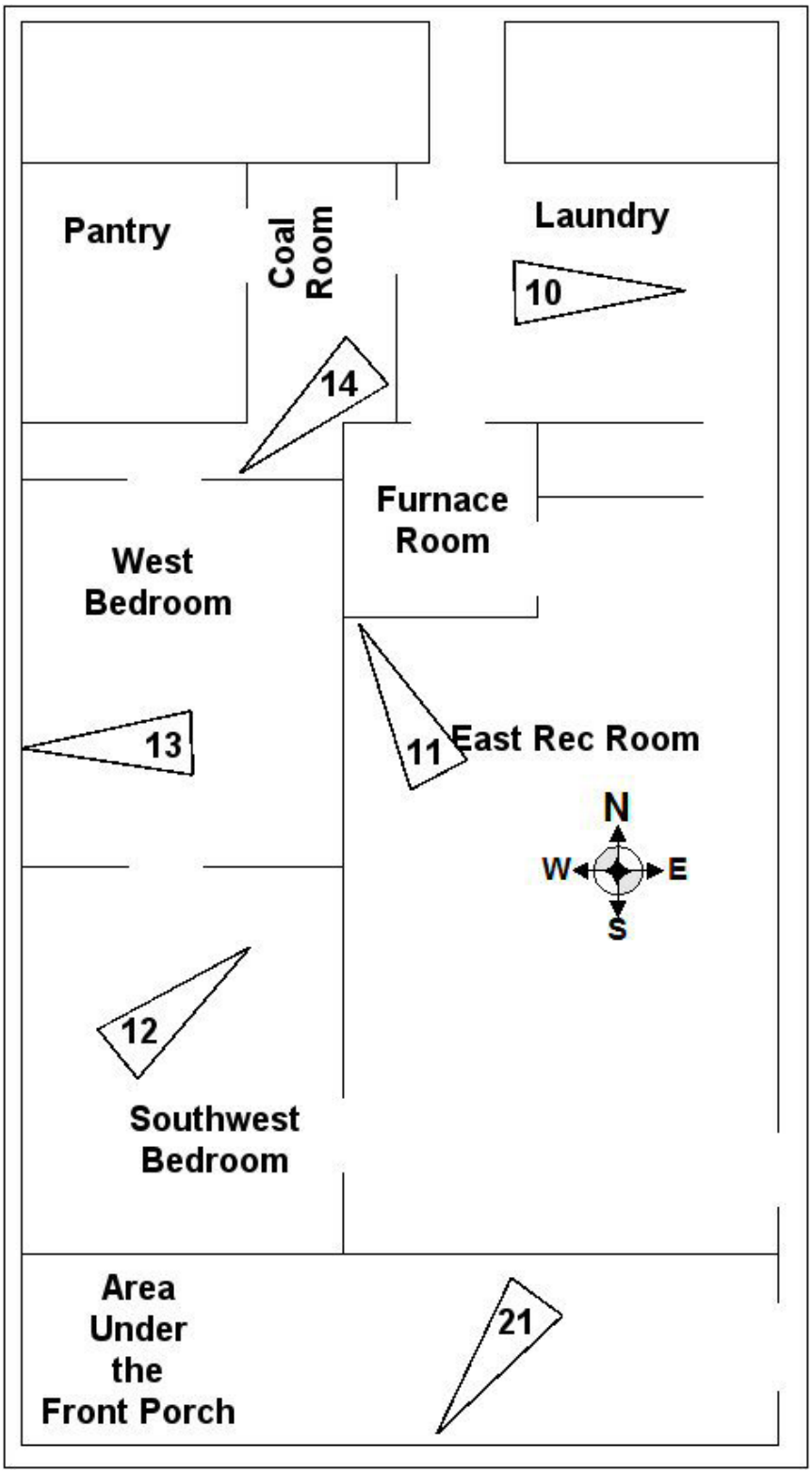

Figure 2
Basement Sample Locations

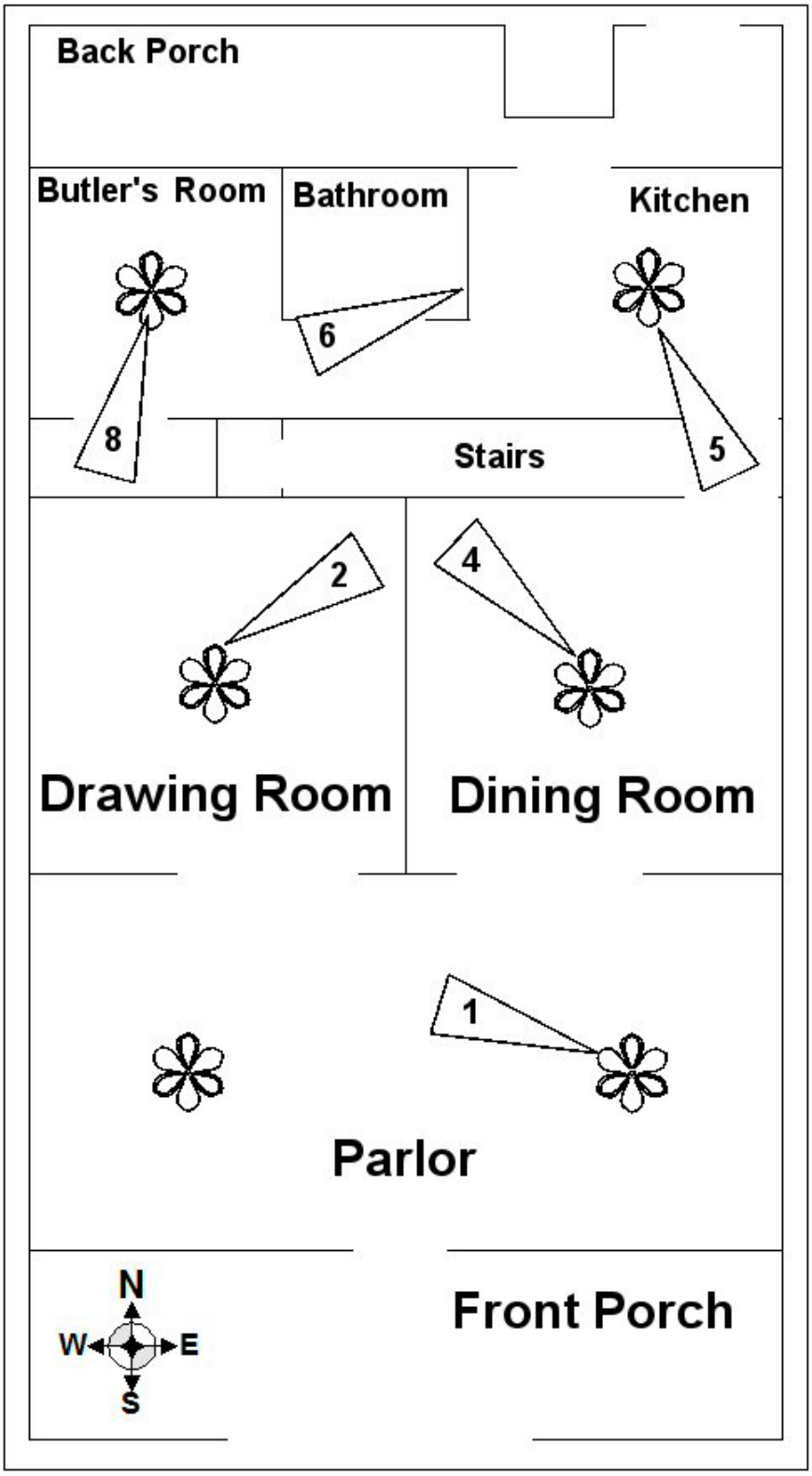

Figure 3
Main Floor Sample Locations

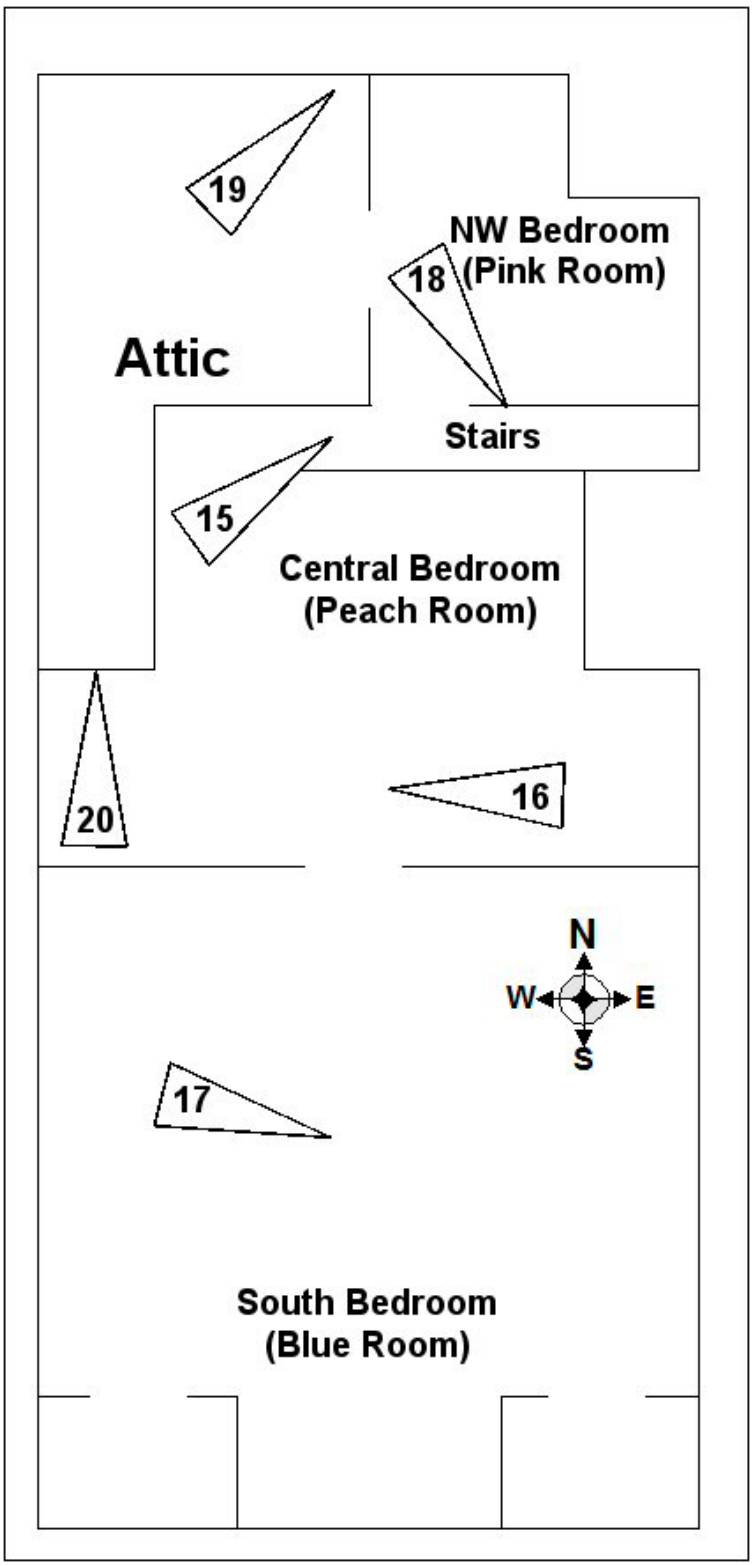

Figure 4
Second Floor Sample Locations

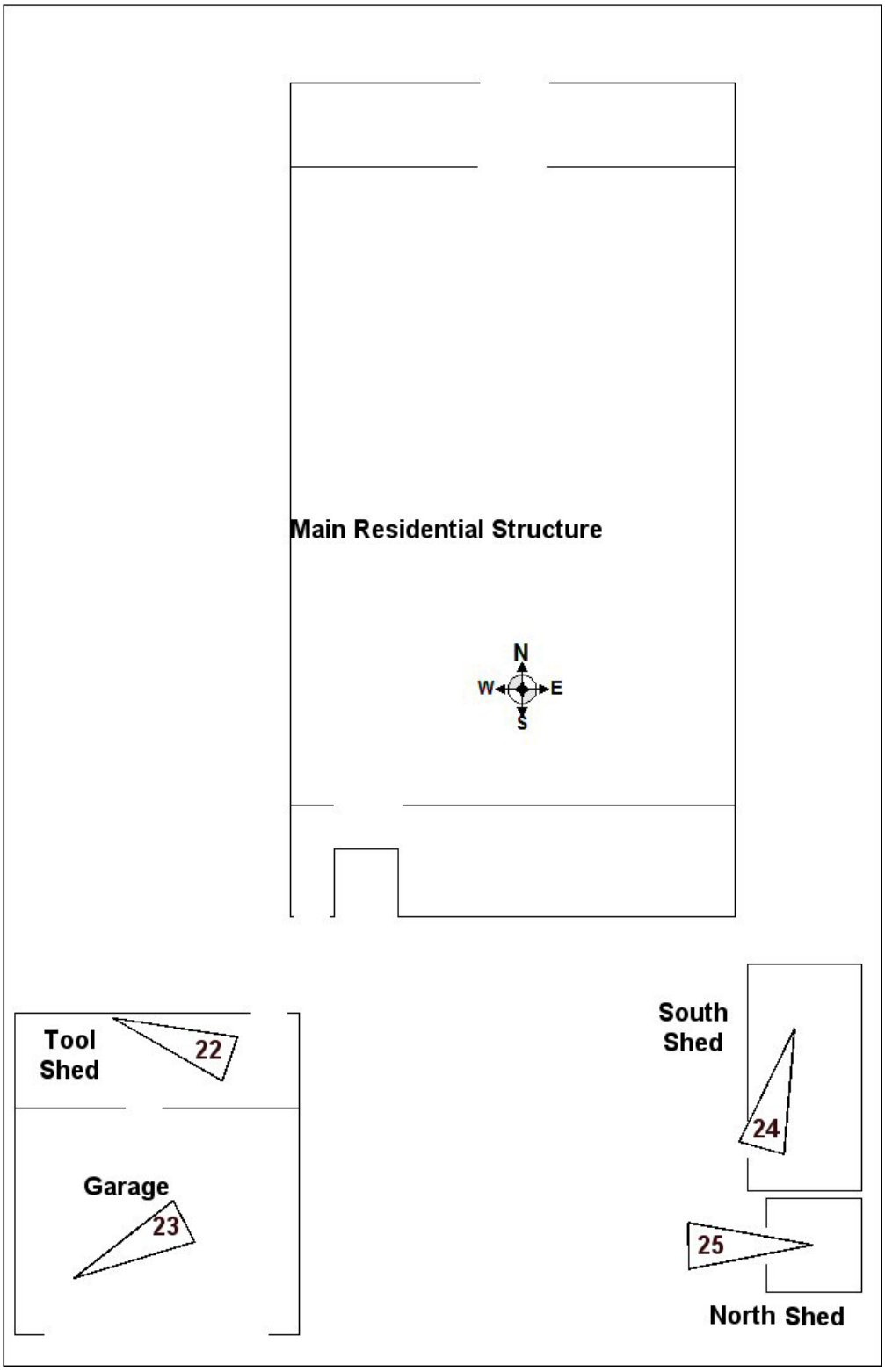

Figure 5
Exterior Building Sample Locations

Identification of Cook/Storage Areas

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

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

In this case, we were informed by a confidential law enforcement source, that although the locations of the actual cook and the locations of storage of chemicals was indentified in public domain law enforcement documents, that such information would not be released to us by the Colorado Springs Records Department.

Based on our sampling results and observations we were not able make a definitive statement about the location of the actual cooking processes, and therefore, we were not able to design our sampling and investigations accordingly. We were informed by a confidential law enforcement source that the cooking process was a "Red-P" cooking method.

Based on our observations, the most probable location for the cook operation was the south shed. However, FACTs bases this on experience only and there was no definitive information for a conclusive conclusion.

Identification of Contamination Migration

FACTs knows that chemicals were stored on the property, however, since the CSPD is unwilling to disclose those locations or disclose the chemicals found, FACTs must rely exclusively on subjective extant observations we make on site. Based on the best information readily available, FACTs was not able to find any indicators that would suggest contamination migration.

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.[11]

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:

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

Structure Number	Functional Space Number	Describe the functional space (See drawings for delineating structural features)
1	1	Parlor (entire room)
1	2	Drawing Room
1	3	Dining Room
1	4	Kitchen
1	5	Bathroom
1	6	Butler's Room
1	7	Stair well down to basement and laundry room
1	8	Downstairs East Recreation Room
1	9	Downstairs Southwest Bedroom
1	10	Downstairs West Bedroom
1	11	Coal room and storage area
1	12	Stairwell up to second floor
1	13	Upstairs Middle Room (Peach Room)
1	14	Upstairs South Room (Blue Room)
1	15	Upstairs North Room (Pink Room)
1	16	Attic
1	17	Furnace system
1	18	Storage area under front porch
2	1	Coach house, Tool shed
2	2	Coach house, Garage
3	1	South Shed
4	1	North Shed

Table 3
Functional Space Inventory

Structure Number 1 - Main Residence

The porches were excluded as potential functional spaces due to the extremely low probability of contamination.

Functional Space 1: Parlor

The Parlor is the anteroom one enters through the front door of the residence. This area has evidence of yellow staining, and the discreet sample collected from the east ceiling fan in this room contained elevated concentrations of methamphetamine (2.5 µg/100cm2).

Functional Space 2: Drawing Room

This is the space one traverses as one moves from the Parlor to the kitchen. There were no visual indicators in this room.

Functional Space 3: Dining Room

This space is entered via a set of double doors on the west side of the Parlor. This space has yellow staining. Other than the yellow staining, there were no significant visual indicators.

Functional Space 4: Kitchen

The kitchen is the space as that term is commonly known. The area is largely devoid of visual indicators.

Functional Space 5: Bathroom

This space is delineated as that term is commonly used. In spite of the large floor space associated with the residence, this was the only bathroom and toilet in the residence. Non-conclusive yellow staining was observed in this space.

Functional Space 6: Butler's Room

This space is the bedroom in the northwest corner of the main floor of the structure. A discreet sample was collected from the ceiling fan in this room. The sample conclusively indicated the presence of methamphetamine at a concentration in excess of regulatory limits. The sample was selected for analysis due to its general location in the structure. This sample was selected since it was spatially separated from the other samples submitted for analysis. The fact that the sample result 7.7 µg/100cm2, was similar to the other results, supports the argument that the contamination in the structure is both elevated and widespread.

Functional Space 7: Downstairs Laundry

The downstairs laundry area contained large appliances and a slop sink. No visual indicators were present in this space.

Functional Space 8: Downstairs East Recreation Room

This functional space is the large room that occupies the length of the southeast basement of the structure. There were non-conclusive visual indicators in the space including "artistic expressions" and staining on the floor consistent with stains seen in cook houses.

Functional Space 9: Downstairs Southwest Bedroom

This space is the downstairs bedroom that occupies the furthest southwest corner of the structure in the basement. There were nonconclusive visual indicators in this room. A discreet sample from this room was submitted for analysis. The result of the sample, 1.6 µg/100cm2, was similar to the concentrations of methamphetamine seen in the other samples.

Functional Space 10: Downstairs West Bedroom

This is the central most room along the west side of the basement. This room had several conclusive indicators of controlled substance use and storage including marijuana leaves embedded in the paint on the walls as decoration. The room also had non-conclusive indicators such as a gang graffito and other gang related "artistic expressions."

Functional Space 11: Coal Room and Storage

The coal room occupies the northwest-most corner of the basement in the structure. The room contained several non-conclusive indicators. Within the room is a smaller *ad hoc* room that appears to have served as storage area..

Functional Space 12: Stairwell from the Main Floor to the Second Floor

This area is listed as a separate functional space due to the fact the space acts as a major thermal bypass with sharp termination at both ends. Therefore, one would expect the concentrations of contaminant to be uniquely different in this space even if the concentrations of the contaminant for the structure as an whole are uniformly distributed.

This space contained non-conclusive visual indicators.

Functional Space 13: Upstairs Middle Room (Peach Room)

This is the large central upstairs room. This space contained several non-conclusive visual indicators. The sample representing the furnace interior was collected in this room.

Functional Space 14: Upstairs South Room (Blue Room)

This is the southernmost upstairs room. This room contained several non-conclusive visual indicators.

Functional Space 15: Upstairs North Bedroom (Pink Room)

This room is the northernmost upstairs "bedroom." Access to the attic is found in this room. This room did not contain any notable visual indicators.

Functional Space 16: Attic

The attic is rather small and does not completely match the total roof area. The attic we observed was limited just to the northwest corner of the structure. It is possible that another, "hidden" attic may be present, but the access to which has been sealed and was not located.

The attic contained some non-conclusive visual indicators including structural modifications, glassware and unusual equipment. The attic has been included in the remediation process, and will need to be decontaminated.

Functional Space 17: Furnace System

Although arguably not a functional space *per se*, a discreet wipe sample was collected from an interior furnace duct. The sample was collected from behind the supply grille located in the Peach Room. The discreet sample indicated that methamphetamine

contamination in the furnace system was elevated (5.5 µg/100 cm2) and exceeded the regulatory limit.

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%[12] and half[13] of the substance is released from the user's pipe. Of that material which is inhaled, between 33%[14] and 10%[15] 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[16] in Denver, Colorado, indicates 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 (µg/m3) to over 130 µg/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*."[17]

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 elevated concentrations of methamphetamine, we conclude the furnace was an effective

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

[13] 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.)

[14] 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.)

[15] 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

[16] 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.)

[17] 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.)

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; all other sample results notwithstanding.

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 entire residence including all areas whose contamination have not been confirmed by sampling. Having said this, the other three samples submitted for analysis objectively confirm the existence of widespread contamination.

Functional Space 18: Area Under Front Porch

The area under the front porch was identified as a functional space since there was evidence of considerable use and storage. The area, although exterior to the superstructure, is nevertheless enclosed and may have been used as a cook area.

Structure Number 2 – Coach House

Based on our professional experience, due to the widespread levels of contamination in the main structure, we presumed the entire Coach House is probably contaminated. Although samples were collected from this structure the samples were archived.

Due to the remaining chattels materials in the structure, it would not be prudent or economically feasible to clear the structure with final clearance sampling prior to remediation, since the items in the structure are not salvageable. Therefore, the entire structure is included in the remediation. If the registered owner chooses to exclude the structure, the remaining items in the structure, as well as the structure itself will need to be cleared for removal pursuant to 6 CCR 1014-3 §5.8. If the items are not cleared, then disposal will mandate the sampling requirements of §6.0.3 anyway. Therefore, under the circumstances, it our opinion, it is more prudent and economically sensible to slate the structure for remediation.

Functional Space 1: Tool Shed

The tool shed is the small ante room on the south end of the structure. There were visual signs of marijuana cultivation in this room.

Functional Space 2: Garage

This functional space did not contain any visual indicators of note. The space is a "garage" as that term is commonly known.

Structure Number 3 – South Shed

Functional Space 1: South Shed Interior

This interior space contained several non-conclusive indicators, including unusual security precautions. The space is a small interior area, and has been included in the remediation process.

Structure Number 4 – North Shed

Functional Space 1: North Shed Interior

The north shed was not remarkable, and did not contain any conclusive visual indicators. FACTs is of the opinion that the north shed is not economically salvageable and should be demolished and removed from the property. If the shed is to remain standing, it must be included in the remediation activities and cleared.

EXTERIOR GROUNDS

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

The northernmost areas of stressed vegetation were consistent with a pen, corral or other type of enclosure.

The stressed vegetation in the front yard was consistent with old tree stumps.

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.

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 exists throughout the residential structure of the subject property.

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

Based on our observations, the entire residence, including the area under the front porch, the back porch, the attic, the furnace system (including all ducts) and all exterior structures must be subjected to 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.

RECOMMENDATION

Universal Site Requirements

Based on our observations, and laboratory results, we recommend standard industry practices for decontamination be followed. The remediation contractor should be given full responsibility for implementing their own standard operating procedures. The following are provided as guidance only and reflect standard practices for the remediation of similar properties. The Governing Body has statutory authority to require a greater degree of decontamination of the subject property.

1. An on-site storage container should be established on the grounds (such as a poly lined and covered roll on-roll off container (ro-ro) or temporary trailer).

2. The on-site container shall be secured with a padlock at all times when not immediately manned by remediation personnel.

3. A licensed contractor, who is trained and experienced in methlab decontamination, as required by State regulations, should be contracted for the decontamination work. All work performed at the residence should be conducted by an experienced contractor whose employees are documented to have been properly trained in accordance with 29 CFR §1910.120 and Colorado Revised Statute §25-18.5-104; *Entry into illegal drug laboratories*.

4. We recommend the decontamination process be conducted in a minimum of Level C PPE ensembles with a minimum of half-face APRs.

5. We recommend that a decontamination corridor with showers be established at the back door leading from the kitchen.

6. All remediation work performed at the residence should be conducted under written contract with a reputable remediation company qualified to perform the work.

7. All work performed at the residence should be conducted with open communication and cooperation with the Colorado Springs Police Department.

8. Discovery of any child pornography shall be immediately reported to the Colorado Springs Police Department.

9. Discovery of any controlled substances or booby traps shall be immediately reported to the Colorado Springs Police Department.

10. Discovery of any hidden triggers or booby traps shall mandate an immediate evacuation of the structure.

11. All remediation work should be presumed to be pursuant to Title 29 of the Code of Federal Regulations, §1910.120 until otherwise indicated.

12. 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. If the air monitoring results in a concentration of greater than 120 µg methamphetamine per cubic meter, the contractor is required to upgrade respiratory protection to a minimum of either full face APR or PAPR.

13. The contractor *should* be contractually obligated to include the personnel air monitoring data in their final documentation.

14. 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(s) should be contractually obligated to be performed at the expense of the contractor.

15. Contractors should be contractually obligated to cover costs of return visits by the Industrial Hygiene and sample expenses as a result of a failed final clearance(s).

16. State regulations prohibit painting or otherwise encapsulating surfaces prior to final clearance sampling by the Industrial Hygienist.

17. State regulations prohibit the use of strong oxidizers to mask the presence of methamphetamine; no cleaning agents greater than **5%** hydrogen peroxide (or other oxidizer) are permitted on site.

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 five QA/QC wipe samples from the subject property, as part of their own QA program, and required to 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 QA/QC samples suggest that contamination in the subject property remains at a concentration in excess of 0.25 µg/100 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 shall perform final clearance sampling according to 6-CCR 1014-3.

21. Duct insulation (or any other fabric materials that are to be left in the property) shall be subjected to final clearance sampling in accordance with standard industrial hygiene microvacuum sampling procedures.[18]

    a. Currently, in the State of Colorado, there are no regulatory limits by which one may compare vacuum results; the interpretation of such results is left within the realm of professional judgment of the Industrial Hygienist. FACTs interprets vacuum samples in the context of contaminant density. The interpretation of the results of the vacuum samples takes into account the size of the surface area sampled, the mass of material removed from that surface, and the mass of contaminant in the removed material. 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 (ρ).

       Based on our database of vacuum samples (n=65) from previous methamphetamine contaminated properties, FACTs has set a qualified density "threshold of concern" of 0.5 ρ. That is, if the methamphetamine density in the duct insulation or other remaining fabric exceeds 0.5 ρ, FACTs will make the unqualified statement that in the absence of conflicting information, the material requires 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.

Decontamination of the Residence

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

[18] For example, see ASTM Method D 5756-02

The following decontamination process should take place in this order:

1. A three part airlock shall be established at the entrance. All items in the residence must be wiped down in the airlock prior to being transloaded through the airlock. Otherwise unmanageable items shall be bagged and/or wrapped, or otherwise prepared to be transported into the airlock where the outside surface of the bag or wrapping can be wiped down.

2. All items in the residence shall be removed and discarded.

3. If the contractor identifies salvageable items of significant financial value (coin collections, jewelry, statuary, etc), they shall contact the registered owner and advise them of the findings.

4. All carpeting and padding shall be bagged and transloaded to the waste storage container.

5. Kitchen cabinets shall be cleaned and not removed.

6. Appliances shall be emptied of all contents (if any), and the interior shall be decontaminated in a normal fashion.

7. The plumbing shall be flushed as normal.

8. Following the removal of interior contents, all surfaces in the entire interior space, 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.

9. The furnace system shall be removed or cleaned in a manner consistent with State regulations.

Enclosures: One CD; Data package, and Appendices

Appendix A:

Supporting Documents

FACTs project name: Kiowa	**Form # ML1**
Date: April 27, 2010	
Reporting IH:	**Caoimhín P. Connell, Forensic IH**

PROPERTY DESCRIPTION:

Physical address	**1314 W Kiowa Street, Colorado Springs**		
Legal description or VIN	Schedule No: 7412326021 Lot 4 Mosleys Subdivision, of Sly 150 Ft Of Block 54 West Colo Springs, Colo Springs		
Registered Property Owner	Aventa Credit Union 2735 Dublin Blvd Colorado Springs Co 80918-1352		
Number of structures	**Four**		
Type of Structures (Each affected structure will need a "Functional Space" inventory)	1: Main Residence	3,817	Square feet
	2: Coach House	324	Square feet
	3: South Shed	60	Square feet
	4: North Shed	25	Square feet
	Total area	4,226	Square feet
Adjacent and/ or surrounding properties	1: North – Alley way and street		
	2: South – Street front		
	3: East – Single family residence		
	4: West – Single family residence		
General Property Observations	**Unoccupied single family residence in fair shape. Devoid of all chattels upon arrival.**		
Presumed Production Method	**Red P pseudoephedrine reduction**		

Plumbing Inspection and Inventory

FACTs project name: Kiowa	Form # ML2
Date: April 27, 2010	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Functional Space	Room	Fixture	Indicia?	Comments
5	Bathroom # 1	Shower	N	No Comment
5	Bathroom # 1	Sink 1	N	
5	Bathroom # 1	Toilet	N	
4	Kitchen	Dishwasher	N	No Comment
4	Kitchen	Sink #1	N	
4	Kitchen	Sink #2	N	
7	Laundry Room	Slop sink #1	N	No Comment
7	Laundry Room	Slop sink #2	N	
7	Laundry Room	Washing machine	N	

Ventilation Inspection and Inventory

Item	Y/N	Indicia ?	Comments
Isolated AHU?	Y	Yes	Methamphetamine present
Common air intake?	N		
Common bathroom exhausts?	N		
Forced air system?	Y		
Steam heat?	Y	NA	No Comment
Common ducts to other properties?	N		
Passive plena to other properties?	N		
Active returns to other properties?	N		
Passive wall grilles to other properties?	N		
Industrial ventilation?	N		
Residential ventilation?	Y		
Pressurized structure?	N		

FUNCTIONAL SPACE INVENTORY

FACTs project name: Kiowa	Form # ML3
Date: April 27, 2010	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Structure Number	Functional Space Number	Describe the functional space (See drawings for delineating structural features)
1	1	Parlor (entire room)
1	2	Drawing Room
1	3	Dining Room
1	4	Kitchen
1	5	Bathroom
1	6	Butler's Room
1	7	Stair well down to basement and laundry room
1	8	Downstairs East Recreation Room
1	9	Downstairs Southwest Bedroom
1	10	Downstairs West Bedroom
1	11	Coal room and storage area
1	12	Stairwell up to second floor
1	13	Upstairs Middle Room (Peach Room)
1	14	Upstairs South Room (Blue Room)
1	15	Upstairs North Room (Pink Room)
1	16	Attic
1	17	Furnace system
1	18	Storage area under front porch
2	1	Coach house, Tool shed
2	2	Coach house, Garage
3	1	South Shed
4	1	North Shed

LAW ENFORCEMENT DOCUMENTATION

FACTs project name: Kiowa	**Form # ML4**
Date: April 27, 2010	
Reporting IH:	**Caoimhín P. Connell, Forensic IH**

Inventory of Reviewed Documents	1: See body of text for explanation 2: 3: 4: 5:
Described method(s) of production	Red P pseudoephedrine reduction
Chemicals identified by the LEA as being present	See body of text
Cooking areas identified	See body of text
Chemical storage areas identified	See body of text
LE Observation on areas of contamination or waste disposal	See body of text

FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

April 22, 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 Longmont at:

1314 W Kiowa Street, Colorado Springs

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 your office and review available information there.

We would like to review any narratives regarding controlled substances or hazardous materials responses, or speak with any Law Enforcement personnel who may be familiar with the property. We are only interested in issues involving controlled substances or hazardous materials responses in the last five years. If no such records are available please let us know and we will merely make that notation in our report to the Governing Body (which we were informed is now your office).

We will be performing the on-site assessment on April 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 <u>any</u> information considered sensitive by an investigating agency. We have developed a close working relationship with Colorado Law Enforcement Agencies, and we value and respect that open line of communication. I have included my SOQ. Please feel free to call me directly with any comments or questions. 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

185 BOUNTY HUNTER'S LANE, BAILEY, COLORADO 80421
PHONE: 303-903-7494 www.forensic-applications.com

FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

April 26, 2010

Tony
Records and ID
Colorado Springs Police Department
705 S Nevada Avenue
Colorado Springs, CO 80903

Via Fax: 719-632-1663

Tony:

Thanks for the short notice phone call. 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:

1314 W Kiowa Street, Colorado Springs

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 your office and review available information there.

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

We will be performing the on-site assessment on April 27, 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, as I mentioned, we were initially asked to submit the request to V&N who, today told us to resubmit to your office.

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 Colorado Law Enforcement Agencies, and we value and respect that open line of communication. I have included my SOQ. Please feel free to call me directly with any comments or questions. Please advise us of any fees associated with our request.

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Sincerely,

Caoimhín P. Connell
Forensic Industrial Hygienist

185 BOUNTY HUNTER'S LANE, BAILEY, COLORADO 80421
PHONE: 303-903-7494 www.forensic-applications.com

Field Observations

FACTs project name: Kiowa	Form # ML5
Date: April 27, 2010	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Structure: 1

Indicator	Functional Space	Indicator	Functional Space
Acids	No comment	Marijuana	10
Aerosol cans	No comment	Match components	No comment
Alcohols (MeOH, EtOH)	No comment	Mercury	No comment
Ammonia	No comment	Methamphetamine	1,6,9,17
Ammunition	No comment	Modified coolers	No comment
Artistic expressions	8,9,10	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 drugs	No comment
Booby traps	No comment	OTC Containers	No comment
Bullet holes	No comment	pH papers/indicators	No comment
Burn marks	No comment	Phenyl-2-propanone	No comment
Chemical storage	7 (1), 18(1)	Posted property	No comment
Colored wastes	No comment	Pornography, Sex toys	No comment
Corrosion on surfaces	No comment	Prescription drugs	No comment
Delaminating paint	No comment	Presence of cats	No comment
Drug paraphernalia	10,	(Pseudo)ephedrine	No comment
Electrical modifications	No comment	Red P	10
Faeces	No comment	Red Staining	No comment
Filters	No comment	Salt or Salters	No comment
Forced entry marks	No comment	Security devices	No comment
Gang markings	10	Smoke detectors disabled	No comment
Gas cylinders	No comment	Solvents (organic)	No comment
Gerry cans	No comment	Squalor	No comment
Glassware	16	Staining on walls or ceiling	10,13,14
Graffiti	10	Staining on floors	8,9,10,13,14
Heating mantle	No comment	Stash holes	11
Heet or similar	No comment	Structural modifications	11
Hydrogen peroxide	No comment	Tubing	No comment
Iodine	No comment	Urine containers	No comment
Kitty litter	No comment	Weapons	11
Lead	No comment	Window block material	No comment
Lithium	No comment	Yellow staining	1,3,5,11,12,13,14

Notes
① Present but not as indicia
② Copious or unusual quantities

Field Observations

FACTs project name: Kiowa	Form # ML5
Date: April 27, 2010	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Structure: 4

Indicator	Functional Space	Indicator	Functional Space
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	No Comment
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 drugs	No Comment
Booby traps	No Comment	OTC Containers	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	1	Presence of cats	No Comment
Delaminating paint	No Comment	(Pseudo)ephedrine	No Comment
Drug paraphernalia	No Comment	Red P	No Comment
Electrical modifications	No Comment	Red Staining	No Comment
Faeces	No Comment	Salt or Salters	No Comment
Filters	No Comment	Security devices	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	Staining on floors	No Comment
Heating mantle	No Comment	Stash holes	No Comment
Heet or similar	No Comment	Structural modifications	No Comment
Hydrogen peroxide	No Comment	Tubing	No Comment
Iodine	No Comment	Urine containers	No Comment
Kitty litter	No Comment	Weapons	No Comment
Lead	No Comment	Window block material	No Comment
Lithium	No Comment	Yellow staining	1

Notes
① Present but not as indicia
② Copious or unusual quantities

Field Observations

FACTs project name: Kiowa	Form # ML5
Date: April 27, 2010	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Structure: 3

Indicator	Functional Space	Indicator	Functional Space
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	No Comment
Ammunition	No Comment	Modified coolers	No Comment
Artistic expressions	1	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 drugs	No Comment
Booby traps	No Comment	OTC Containers	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	(Pseudo)ephedrine	No Comment
Drug paraphernalia	No Comment	Red P	No Comment
Electrical modifications	No Comment	Red Staining	No Comment
Faeces	No Comment	Salt or Salters	No Comment
Filters	No Comment	Security devices	1
Forced entry marks	1	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	Staining on floors	No Comment
Heating mantle	No Comment	Stash holes	No Comment
Heet or similar	No Comment	Structural modifications	No Comment
Hydrogen peroxide	No Comment	Tubing	No Comment
Iodine	No Comment	Urine containers	No Comment
Kitty litter	No Comment	Weapons	No Comment
Lead	No Comment	Window block material	No Comment
Lithium	No Comment	Yellow staining	1

Notes
① Present but not as indicia
② Copious or unusual quantities
③ Present in normal household expectations
④ Modified in manner consistent with clanlab use

Field Observations

FACTs project name: Kiowa	Form # ML5
Date: April 27, 2010	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Structure: 2

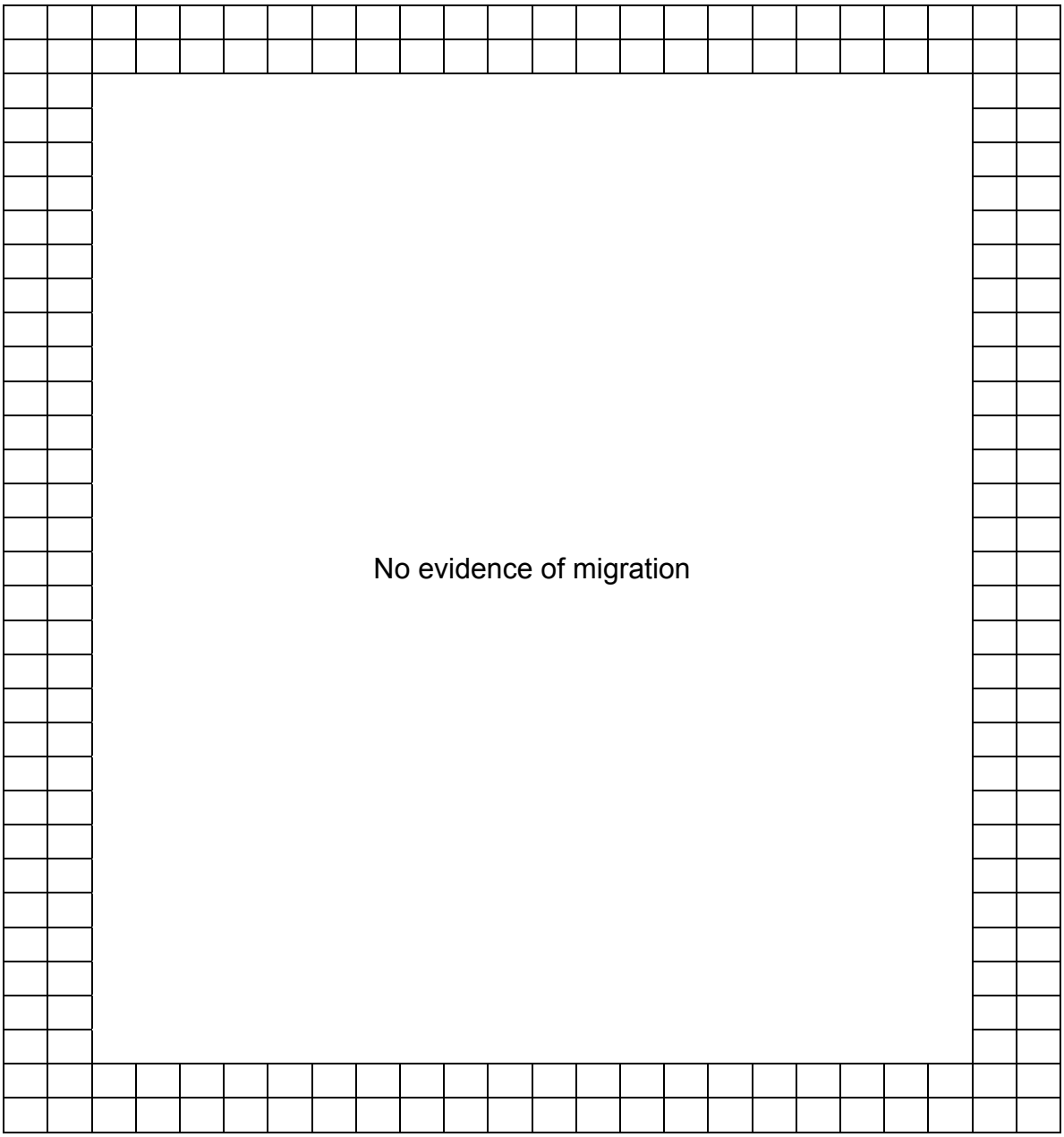
Indicator	Functional Space	Indicator	Functional Space
Acids	No Comment	Marijuana equipment	1
Aerosol cans	No Comment	Match components	No Comment
Alcohols (MeOH, EtOH)	No Comment	Mercury	No Comment
Ammonia	No Comment	Methamphetamine	No Comment
Ammunition	No Comment	Modified coolers	No Comment
Artistic expressions	2	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 drugs	No Comment
Booby traps	No Comment	OTC Containers	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	(Pseudo)ephedrine	No Comment
Drug paraphernalia	No Comment	Red P	No Comment
Electrical modifications	No Comment	Red Staining	No Comment
Faeces	No Comment	Salt or Salters	No Comment
Filters	No Comment	Security devices	2
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	Staining on floors	1①,2①
Heating mantle	No Comment	Stash holes	No Comment
Heet or similar	No Comment	Structural modifications	No Comment
Hydrogen peroxide	No Comment	Tubing	No Comment
Iodine	No Comment	Urine containers	No Comment
Kitty litter	No Comment	Weapons	No Comment
Lead	No Comment	Window block material	No Comment
Lithium	No Comment	Yellow staining	No Comment

Notes
① Present but not as indicia
② Copious or unusual quantities

Contaminant Migration Observations

FACTs project name: Kiowa	Form # ML6
Date: April 27, 2010	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Describe/identify adjacent areas where contaminants may have migrated.



Each grid equals approximately _____ (Approximate lay-out; Not to scale)

Describe the area:_____

_____

_____

_____

Individual Sewage Disposal System Field Form

FACTs project name: Kiowa	Form # ML7
Date: April 27, 2010	
Reporting IH:	Caoimhín P. Connell, Forensic IH

	Yes/No	NA	N/C
Does the property have an ISDS	N		
Is there unusual staining around internal drains	N		
Are solvent odors present from the internal drains	N		
Is there evidence of wastes being disposed down internal drains	N		
Are solvent odors present from the external sewer drain stacks			N
Was the septic tank lid(s) accessible		NA	
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)			
Were organic vapors measured in the septic tank (if "yes" see below)			
Is sampling of the ISDS warranted			
Were calawasi/drum thief samples collected from the septic tank			

*NC = Not checked

Qualitative Organic Vapor Monitoring

Hydrocarbon detector model	EnMet Target Series, MOS detector
This section blank	

Location	MOS*	PID*	FID*
This section blank			

*Units of measurement are in parts per million equivalents compared to the calibration vapor.

Notes

Pre-Remediation Photograph Log Sheet

FACTs project name: Kiowa	Form # ML8
Date: April 27, 2010	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Name	Date taken
attic	4/27/2010 16:44
attic (2)	4/27/2010 16:44
attic (3)	4/27/2010 16:45
attic (4)	4/27/2010 18:27
attic (5)	4/27/2010 18:27
attic (6)	4/27/2010 18:27
attic (7)	4/27/2010 18:28
back porch	4/27/2010 17:12
back porch (2)	4/27/2010 17:12
back porch (3)	4/27/2010 17:12
back porch (4)	4/27/2010 17:12
basement	4/27/2010 18:00
basement stairs	4/27/2010 16:47
bathroom	4/27/2010 16:36
bathroom (2)	4/27/2010 16:36
bathroom (3)	4/27/2010 16:36
bathroom (4)	4/27/2010 16:36
bathroom (5)	4/27/2010 16:36
bathroom (6)	4/27/2010 16:36
bathroom (7)	4/27/2010 16:36
bathroom (8)	4/27/2010 17:51
blue room	4/27/2010 16:41
blue room (2)	4/27/2010 16:41
blue room (3)	4/27/2010 16:41
blue room (4)	4/27/2010 16:41

Name	Date taken
blue room (5)	4/27/2010 16:42
blue room (6)	4/27/2010 16:42
blue room (7)	4/27/2010 16:42
blue room (8)	4/27/2010 16:42
blue room (9)	4/27/2010 16:43
blue room (10)	4/27/2010 16:43
blue room (11)	4/27/2010 16:43
blue room (12)	4/27/2010 16:43
bsmt	4/27/2010 18:05
BSMT	
bsmt above joists	4/27/2010 18:00
bsmt above joists (2)	4/27/2010 18:00
bsmt above joists (3)	4/27/2010 18:01
bsmt above joists (4)	4/27/2010 18:01
bsmt above joists (5)	4/27/2010 18:01
bsmt above joists (6)	4/27/2010 18:01
bsmt furnace	4/27/2010 18:04
Bsmt Rec room	4/27/2010 18:06
butler's bedroom	4/27/2010 16:35
butler's bedroom (2)	4/27/2010 16:37
butler's bedroom (3)	4/27/2010 16:37
butler's bedroom (4)	4/27/2010 16:37
butler's bedroom (5)	4/27/2010 16:37
butler's bedroom (6)	4/27/2010 16:37
butler's bedroom (7)	4/27/2010 16:37

Pre-Remediation Photograph Log Sheet

FACTs project name: Kiowa	Form # ML8
Date: April 27, 2010	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Name	Date taken
butler's bedroom (8)	4/27/2010 16:38
coal storage	4/27/2010 16:52
coal storage (2)	4/27/2010 16:52
coal storage (3)	4/27/2010 16:52
coal storage (4)	4/27/2010 16:52
coal storage (5)	4/27/2010 16:52
coal storage (6)	4/27/2010 16:52
coal storage (7)	4/27/2010 16:52
coal storage (8)	4/27/2010 16:53
coal storage (9)	4/27/2010 16:53
coal storage (10)	4/27/2010 16:53
coal storage (11)	4/27/2010 16:54
coal storage (12)	4/27/2010 16:54
coal storage (13)	4/27/2010 16:54
coal storage (14)	4/27/2010 16:54
coal storage (15)	4/27/2010 16:54
coal storage (16)	4/27/2010 16:54
coal storage (17)	4/27/2010 16:54
coal storage (18)	4/27/2010 16:55
coal storage (19)	4/27/2010 16:55
coal storage (20)	4/27/2010 16:55
coal storage (21)	4/27/2010 16:55
coal storage (22)	4/27/2010 16:55
dining room	4/27/2010 16:38
drawing room	4/27/2010 16:34

Name	Date taken
drawing room (2)	4/27/2010 16:34
drawing room (3)	4/27/2010 16:34
drawing room (4)	4/27/2010 17:27
E Rec room	4/27/2010 16:47
E Rec room (2)	4/27/2010 16:47
E Rec room (3)	4/27/2010 16:47
E Rec room (4)	4/27/2010 16:48
E Rec room (5)	4/27/2010 16:48
E Rec room (6)	4/27/2010 16:48
E Rec room (7)	4/27/2010 16:48
E Rec room (8)	4/27/2010 16:48
E Rec room (9)	4/27/2010 16:48
E Rec room (10)	4/27/2010 16:48
E Rec room (11)	4/27/2010 16:48
exterior	4/27/2010 16:09
exterior (2)	4/27/2010 16:58
exterior (3)	4/27/2010 16:59
exterior (4)	4/27/2010 16:59
exterior (5)	4/27/2010 16:59
exterior (6)	4/27/2010 16:59
exterior (7)	4/27/2010 17:00
exterior (8)	4/27/2010 17:03
exterior (9)	4/27/2010 17:03
exterior (10)	4/27/2010 17:03
exterior (11)	4/27/2010 17:03

Pre-Remediation Photograph Log Sheet

FACTs project name: Kiowa	Form # ML8
Date: April 27, 2010	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Name	Date taken
exterior (12)	4/27/2010 17:03
exterior (13)	4/27/2010 17:04
exterior (14)	4/27/2010 17:04
exterior (15)	4/27/2010 17:04
exterior (16)	4/27/2010 17:04
exterior (17)	4/27/2010 17:04
exterior (18)	4/27/2010 17:04
exterior (19)	4/27/2010 17:04
exterior (20)	4/27/2010 17:08
exterior (21)	4/27/2010 17:09
exterior (22)	4/27/2010 17:09
exterior (23)	4/27/2010 17:09
exterior (24)	4/27/2010 17:09
exterior (25)	4/27/2010 17:10
exterior (26)	4/27/2010 17:10
exterior (27)	4/27/2010 17:11
exterior (28)	4/27/2010 17:11
exterior (29)	4/27/2010 17:11
exterior (30)	4/27/2010 17:11
exterior (31)	4/27/2010 17:12
exterior (32)	4/27/2010 17:12
exterior (33)	4/27/2010 17:12
exterior (34)	4/27/2010 17:12
exterior back strs	4/27/2010 16:58
exterior bsmt strs	4/27/2010 16:58

Name	Date taken
exterior grounds	4/27/2010 17:02
exterior grounds (2)	4/27/2010 17:02
exterior grounds (3)	4/27/2010 17:02
exterior grounds (4)	4/27/2010 17:03
exterior strairs	4/27/2010 16:57
garage	4/27/2010 16:59
garage (2)	4/27/2010 16:59
garage (3)	4/27/2010 17:00
garage (4)	4/27/2010 17:03
garage (5)	4/27/2010 17:04
garage (6)	4/27/2010 17:05
garage (7)	4/27/2010 17:05
garage (8)	4/27/2010 17:05
garage (9)	4/27/2010 17:05
garage (10)	4/27/2010 17:06
garage (11)	4/27/2010 17:06
garage (12)	4/27/2010 17:06
garage (13)	4/27/2010 17:06
garage (14)	4/27/2010 17:06
garage (15)	4/27/2010 17:06
garage (16)	4/27/2010 17:06
garage (17)	4/27/2010 17:06
garage (18)	4/27/2010 17:06
garage (19)	4/27/2010 17:07
garage (20)	4/27/2010 17:07

Pre-Remediation Photograph Log Sheet

FACTs project name: Kiowa	Form # ML8
Date: April 27, 2010	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Name	Date taken
garage (21)	4/27/2010 17:07
garage (22)	4/27/2010 17:07
garage (23)	4/27/2010 17:07
garage (24)	4/27/2010 17:07
garage (25)	4/27/2010 17:07
garage (26)	4/27/2010 17:07
garage (27)	4/27/2010 17:08
garage (28)	4/27/2010 17:08
garage (29)	4/27/2010 17:08
garage coach	4/27/2010 19:00
garage coach (2)	4/27/2010 19:01
GENBLD	
hottub	4/27/2010 17:02
IMG_8994	4/27/2010 19:19
into back yard	4/27/2010 17:08
into coal room	4/27/2010 16:51
into dining room	4/27/2010 16:33
into dining room (2)	4/27/2010 16:37
into dining room (3)	4/27/2010 16:38
into drawing rm	4/27/2010 16:33
into hallway	4/27/2010 16:38
into hallway (2)	4/27/2010 16:38
into hallway (3)	4/27/2010 16:38
into laundry	4/27/2010 16:55
into parlor	4/27/2010 16:34

Name	Date taken
into parlor (2)	4/27/2010 16:39
into parlor (3)	4/27/2010 19:19
into w bedroom	4/27/2010 16:50
into w bedroom (2)	4/27/2010 16:53
kitchen	4/27/2010 16:34
kitchen (2)	4/27/2010 16:34
kitchen (3)	4/27/2010 16:34
kitchen (4)	4/27/2010 16:35
kitchen (5)	4/27/2010 16:35
kitchen (6)	4/27/2010 16:35
kitchen (7)	4/27/2010 16:35
kitchen (8)	4/27/2010 16:35
kitchen (9)	4/27/2010 16:35
kitchen (10)	4/27/2010 16:35
kitchen (11)	4/27/2010 16:35
kitchen (12)	4/27/2010 16:46
kitchen (13)	4/27/2010 16:46
kitchen (14)	4/27/2010 17:13
kitchen (15)	4/27/2010 17:13
kitchen (16)	4/27/2010 17:13
kitchen (17)	4/27/2010 17:13
laundry	4/27/2010 16:47
laundry (2)	4/27/2010 16:56
laundry (3)	4/27/2010 16:56
laundry (4)	4/27/2010 16:56

Pre-Remediation Photograph Log Sheet

FACTs project name: Kiowa	Form # ML8
Date: April 27, 2010	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Name	Date taken
laundry (5)	4/27/2010 16:56
laundry (6)	4/27/2010 16:56
laundry (7)	4/27/2010 16:56
laundry (8)	4/27/2010 16:56
laundry (9)	4/27/2010 16:56
laundry (10)	4/27/2010 16:57
laundry room	4/27/2010 18:02
lower back stairs	4/27/2010 16:57
MAINFLR	
no shed	4/27/2010 16:59
no shed (2)	4/27/2010 17:01
no shed (3)	4/27/2010 17:02
no shed (4)	4/27/2010 17:02
no shed (5)	4/27/2010 17:02
no shed (6)	4/27/2010 17:02
no shed (7)	4/27/2010 17:02
no shed (8)	4/27/2010 19:09
no shed (9)	4/27/2010 19:11
out to backyard	4/27/2010 18:32
parlor	4/27/2010 16:33
parlor (2)	4/27/2010 16:33
parlor (3)	4/27/2010 16:33
parlor (4)	4/27/2010 16:33
parlor (5)	4/27/2010 19:19
peach room	4/27/2010 16:40

Name	Date taken
peach room (2)	4/27/2010 16:39
peach room (3)	4/27/2010 16:40
peach room (4)	4/27/2010 16:40
peach room (5)	4/27/2010 16:40
peach room (6)	4/27/2010 16:41
peach room (7)	4/27/2010 16:41
peach room (8)	4/27/2010 16:41
peach room (9)	4/27/2010 16:41
peach room (10)	4/27/2010 16:41
peach room (11)	4/27/2010 16:43
pink room	4/27/2010 16:39
pink room (2)	4/27/2010 16:40
pink room (3)	4/27/2010 16:40
pink room (4)	4/27/2010 16:40
pink room (5)	4/27/2010 18:24
pink room (6)	4/27/2010 18:25
sample 1 (2)	4/27/2010 17:36
sample 1 (3)	4/27/2010 17:36
sample 1	4/27/2010 17:36
sample 2 (2)	4/27/2010 17:39
sample 2 (3)	4/27/2010 17:39
sample 2 (4)	4/27/2010 17:39
sample 2	4/27/2010 17:38
sample 4 (2)	4/27/2010 17:41
sample 4 (3)	4/27/2010 17:42

Pre-Remediation Photograph Log Sheet

FACTs project name: Kiowa	Form # ML8
Date: April 27, 2010	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Name	Date taken	Name	Date taken
sample 4 (6)	4/27/2010 17:44	sample 14 (2)	4/27/2010 18:20
sample 4	4/27/2010 17:41	sample 14 (3)	4/27/2010 18:20
sample 5 (2)	4/27/2010 17:57	sample 14	4/27/2010 18:19
sample 5 (3)	4/27/2010 17:57	sample 15 (2)	4/27/2010 18:35
sample 5 (4)	4/27/2010 17:58	sample 15 (3)	4/27/2010 18:35
sample 5	4/27/2010 17:56	sample 15	4/27/2010 18:32
sample 6 (2)	4/27/2010 17:49	sample 16 (2)	4/27/2010 18:37
sample 6 (3)	4/27/2010 17:50	sample 16 (3)	4/27/2010 18:38
sample 6 (4)	4/27/2010 17:51	sample 16	4/27/2010 18:37
sample 6	4/27/2010 17:48	sample 17 (2)	4/27/2010 18:42
sample 8 (2)	4/27/2010 17:46	sample 17	4/27/2010 18:41
sample 8 (3)	4/27/2010 17:46	sample 18 (2)	4/27/2010 18:26
sample 8 (4)	4/27/2010 17:46	sample 18 (3)	4/27/2010 18:26
sample 8 (5)	4/27/2010 17:47	sample 18	4/27/2010 18:26
sample 8	4/27/2010 17:45	sample 19	4/27/2010 18:30
sample 10 (2)	4/27/2010 18:02	sample 20 (2)	4/27/2010 18:46
sample 10 (3)	4/27/2010 18:03	sample 20 (3)	4/27/2010 18:47
sample 10	4/27/2010 18:01	sample 20 (4)	4/27/2010 18:47
sample 11 (2)	4/27/2010 18:07	sample 20	4/27/2010 18:45
sample 11	4/27/2010 18:06	sample 21 (2)	4/27/2010 18:51
sample 12 (2)	4/27/2010 18:10	sample 21 (3)	4/27/2010 18:51
sample 12	4/27/2010 18:09	sample 21 (4)	4/27/2010 18:52
sample 13 (2)	4/27/2010 18:15	sample 21	4/27/2010 18:51
sample 13 (3)	4/27/2010 18:18	sample 22 (2)	4/27/2010 19:02
sample 13	4/27/2010 18:15	sample 22 (3)	4/27/2010 19:02

Pre-Remediation Photograph Log Sheet

FACTs project name: Kiowa	Form # ML8
Date: April 27, 2010	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Name	Date taken
sample 22 (4)	4/27/2010 19:02
sample 22	4/27/2010 19:01
sample 23 (2)	4/27/2010 19:04
sample 23 (3)	4/27/2010 19:05
sample 23	4/27/2010 19:03
sample 24 (2)	4/27/2010 19:12
sample 24	4/27/2010 19:12
sample 25 (2)	4/27/2010 19:11
sample 25	4/27/2010 19:10
samples	4/27/2010 17:23
samples (2)	4/27/2010 17:23
South shed	4/27/2010 16:59
South shed (2)	4/27/2010 16:59
South shed (3)	4/27/2010 17:00
South shed (4)	4/27/2010 17:00
South shed (5)	4/27/2010 17:01
South shed (6)	4/27/2010 17:01
South shed (7)	4/27/2010 17:01
South shed (8)	4/27/2010 17:01
South shed (9)	4/27/2010 19:14
stairs down	4/27/2010 16:38
stairs down (2)	4/27/2010 16:38
stairs down (3)	4/27/2010 16:39
stairs down (4)	4/27/2010 16:47
stairs down (5)	4/27/2010 17:59

Name	Date taken
stairs up	4/27/2010 16:34
surg gloves	4/27/2010 18:56
surgical gloves	4/27/2010 19:20
surgical gloves (2)	4/27/2010 19:19
surgical gloves (3)	4/27/2010 19:21
surgical gloves (4)	4/27/2010 19:22
sw bedroom	4/27/2010 16:49
sw bedroom (2)	4/27/2010 16:49
sw bedroom (3)	4/27/2010 16:49
sw bedroom (4)	4/27/2010 16:49
sw bedroom (5)	4/27/2010 16:49
sw bedroom (6)	4/27/2010 16:49
sw bedroom (7)	4/27/2010 16:50
sw bedroom (8)	4/27/2010 16:50
under back porch	4/27/2010 16:57
under back porch (2)	4/27/2010 16:57
under back porch (3)	4/27/2010 16:57
under back porch (4)	4/27/2010 16:58
under back porch (5)	4/27/2010 16:58
under back porch (6)	4/27/2010 16:58
under back porch (7)	4/27/2010 16:58
under front porch	4/27/2010 17:10
under front porch (2)	4/27/2010 17:10
under front porch (3)	4/27/2010 17:11
under front porch (4)	4/27/2010 17:11

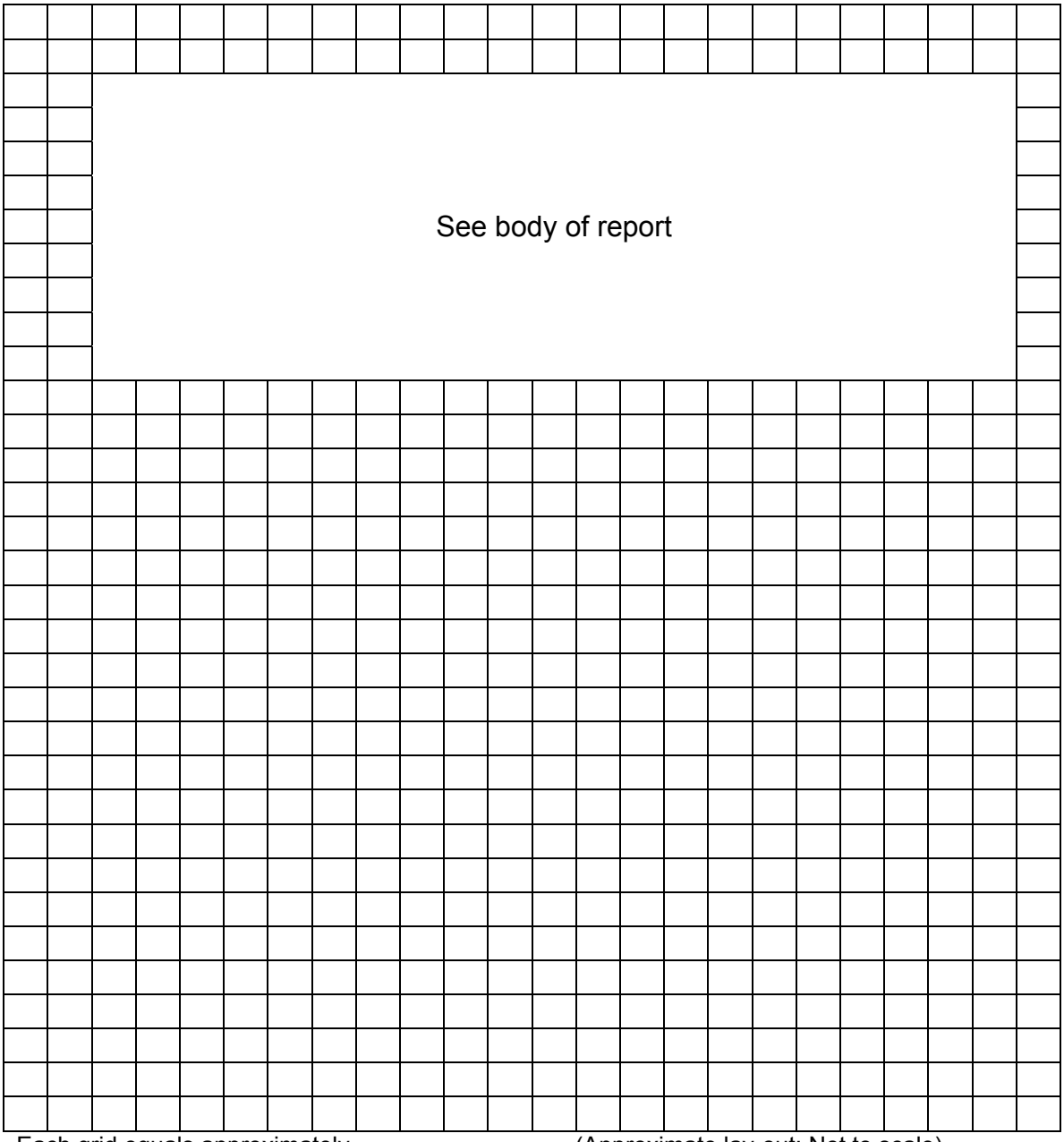
Pre-Remediation Photograph Log Sheet

FACTs project name: Kiowa	Form # ML8
Date: April 27, 2010	
Reporting IH:	Caoimhín P. Connell, Forensic IH

under front porch (5)	4/27/2010 17:17
under front porch (6)	4/27/2010 18:51
under front porch (7)	4/27/2010 18:51
under front porch (8)	4/27/2010 18:51
under front porch (9)	4/27/2010 18:53
w bedroom	4/27/2010 16:50
w bedroom (2)	4/27/2010 16:50
w bedroom (3)	4/27/2010 16:50
w bedroom (4)	4/27/2010 16:50
w bedroom (5)	4/27/2010 16:50
w bedroom (6)	4/27/2010 16:50
w bedroom (7)	4/27/2010 16:51
w bedroom (8)	4/27/2010 16:51
w bedroom (9)	4/27/2010 16:51
w bedroom (10)	4/27/2010 16:51
w bedroom (11)	4/27/2010 16:51
w bedroom (12)	4/27/2010 16:51

Drawing of Cook Area(s)

FACTs project name: Kiowa	Form # ML10
Date: April 27, 2010	
Reporting IH:	Caoimhín P. Connell, Forensic IH



Each grid equals approximately _____ (Approximate lay-out; Not to scale)

Describe the area:_____

_____

_____

_____

Drawing of Storage/Disposal Area(s)

FACTs project name: Kiowa	Form # ML11
Date: April 27, 2010	
Reporting IH:	Caoimhín P. Connell, Forensic IH

See body of report

Each grid equals approximately _____ (Approximate lay-out; Not to scale)

Describe the area:_____

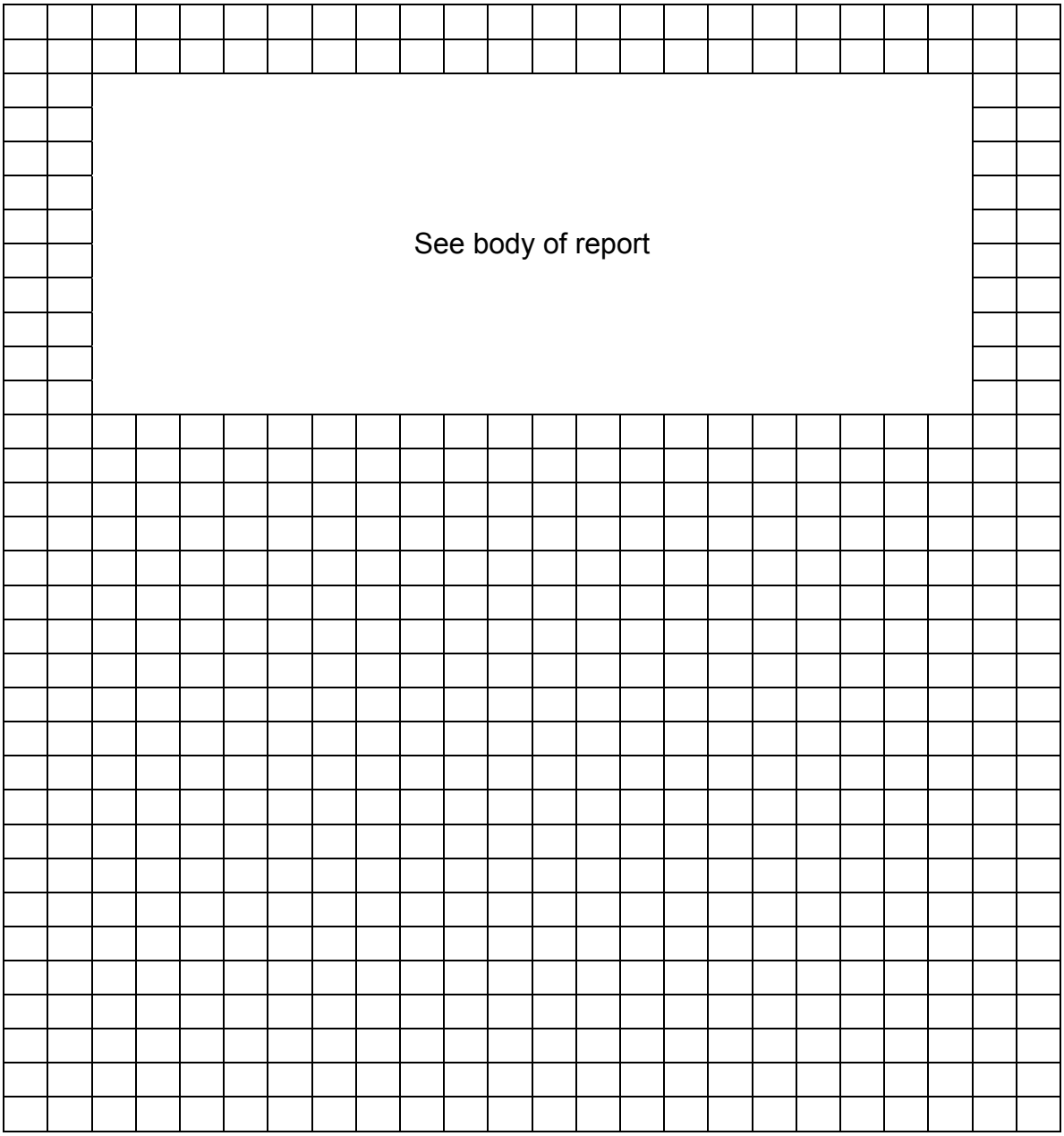
_____

_____

_____

Drawing of General Lab Area

FACTs project name: Kiowa	Form # ML12
Date: April 27, 2010	
Reporting IH:	Caoimhín P. Connell, Forensic IH



Each grid equals approximately _____ (Approximate lay-out; Not to scale)

Describe the area:_____

_____

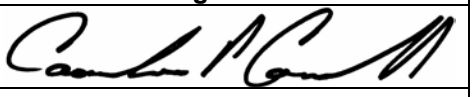
_____

_____

CERTIFICATION, VARIATIONS AND SIGNATURE SHEET

FACTs project name: Kiowa	**Form # ML14**
Date: April 27, 2010	
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.	
~~I do hereby certify that the property has been decontaminated in accordance with the procedures set forth in 6 CCR 1014-3, § 5.~~	XXXXXXXXXXXXXXXXXXX
~~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 1014-3, § 7 have been met as evidenced by testing I conducted.~~	
I do hereby certify that the analytical results reported here are faithfully reproduced.	

In the section below, describe any variations from the standard.
No deviations.

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: May 15, 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:	**Kiowa**	**Form # ML15**
Date May 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; 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 2nd, 7th and 9th Colorado judicial districts. He has provided meth-lab lectures to prestigious organizations such as the County Sheriff's of Colorado, the American Industrial Hygiene Association, and the National Safety Council.

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

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 160 assessments in illegal drug labs, and collected over 1,400 samples during assessments (a detailed list of experience is available on the web at: http://forensic-applications.com/meth/DrugLabExperience2.pdf

He has extensive experience performing assessments pursuant to the Colorado meth-lab regulation, 6 CCR 1014-3, (State Board Of Health *Regulations Pertaining to the Cleanup of Methamphetamine Laboratories*) and was an original team member on two of the legislative working-groups which wrote the regulations for the State of Colorado. Mr. Connell was the primary contributing author of Appendix A (*Sampling Methods And Procedures*) and Attachment to Appendix A (*Sampling Methods And Procedures Sampling Theory*) of the Colorado regulations. He has provided expert witness testimony in civil cases and testified before the Colorado Board of Health and Colorado Legislature Judicial Committee regarding methlab issues. Mr. Connell has provided 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 a coauthor of a 2007 AIHA Publication on methlab assessment and remediation.

185 BOUNTY HUNTER'S LANE, BAILEY, COLORADO 80421
PHONE: 303-903-7494 www.forensic-applications.com

Appendix B

Analytical Reports for FACTs Samples

Sampling Field Form

FACTs project name: Kiowa	**Form # ML17**
Date: April 27, 2010	**Alcohol Lot#: AØ9Ø1 Gauze Lot#: G1ØØ2**
Reporting IH: Caoimhín P. Connell, Forensic IH	**Preliminary X Intermediate____ Final____**

Sample ID KMØ4271Ø-	Type	Location	Func. Space	Dimensions (inches)	Substrate
-Ø1	W	Parlor – east ceiling fan blade	1	See notes	LW
- Ø2	W	Drawing room – Ceiling fan blade	2	See notes	LW
- Ø3	W	Field Blank	NA	NA	NA
- Ø4	W	Dining Room ceiling fan	3	See notes	LW
- Ø5	W	Kitchen Ceiling fan	4	See notes	LW
- Ø6	W	Bathroom, top of light fixture	5	28” X 4”	M
- Ø7	W	Field blank	NA	NA	NA
- Ø8	W	Butler’s Bedroom ceiling fan	6	See notes	LW
- Ø9	W	Field Blank	NA	NA	NA
-1Ø	W	Laundry top of light fixture (this space includes the basement stairs)	7	3” X 30”	M
-11	W	Downstairs east recreation room, top of shelf in NW corner of room	8	9” X 9”	VW
-12	W	Downstairs SW bedroom, top of metal supply duct	9	3” X 27”	M
-13	W	Downstairs west bedroom, west wall at graffito	10	9” X 9”	P concrete
-14	W	Coal room outside storage room top of duct	11	3” X 27”	M
-15	W	Top of 2nd floor stairs ceiling	12	9” X 9”	P plaster

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

Sample -01, -02, -04 and -08: Trapezoidal area b1=4” b2=5.5” h1=18

Sample -05 Trapezoidal area b1=5” b2=6.5” h1=18

Sampling Field Form

FACTs project name: Kiowa	**Form # ML17**
Date: April 27, 2010	**Alcohol Lot#: AØ9Ø1 Gauze Lot#: G1ØØ2**
Reporting IH: Caoimhín P. Connell, Forensic IH	**Preliminary X Intermediate____ Final____**

Sample ID KMØ4271Ø-	Type	Location	Func. Space	Dimension inches	Substrate
-16	W	Upstairs central room (Peach Room) central south ceiling	13	9” X 9”	P plaster
-17	W	Upstairs south bedroom, (Blue Room), central ceiling	14	9” X 9”	P plaster
-18	W	Upstairs north room (Pink Room) top of water tank	15	See notes	M
-19	W	Attic top of black iron sewer pipe	16	3” X 27”	PM
-2Ø	W	Furnace interior from supply grille in Peach Room	17	See notes	M
-21	W	Front porch, area under porch top of copper pipe	18	0.5” X 160”	M
-22	W	Coach house, tool shed, top of shelf on east side	2-1	4” X 24”	Pl
-23	W	Coach house, top of light in northern garage	2-2	2” X 48”	M
-24	W	Shed South, top of light fixture	3-1	3” X 27”	M
-25	W	Shed North top of central metal beam	4-1	0.5” X 160”	M

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

Sample 18: circle, r=6”

Sample 20: Trapezoid b1=5”, b2=10, h1=6” (45 in2); + 5” X 6”

ANALYTICAL CHEMISTRY INC.

Established in 1979

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

Website: www.acilabs.com

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

Lab Reference:	10125-02
Date Received:	April 29, 2010
Date Completed:	May 3, 2010

May 3, 2010

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

CLIENT REF: Kiowa

SAMPLES: wipes/4

ANALYSIS: Methamphetamine by Gas Chromatography-Mass Spectrometry.

RESULTS: in total micrograms (ug)

Sample	***Methamphetamine, ug***	***% Surrogate Recovery***
KM042710- 01	14.1	89
KM042710- 08	23.1	102
KM042710- 12	8.53	106
KM042710- 20	26.3	105
QA/QC Method Blank	< 0.004	
QC 4.0 ug Standard	3.99	
QA 0.020 ug Matrix Spike	0.021	
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

ANALYTICAL CHEMISTRY INC.

4611 S 134th Pl, Ste 200 Tukwila WA 98168-3240
Website: www.acilabs.com
Phone: 206-622-8353
FAX: 206-622-4623

CDL SAMPLING & CUSTODY FORM

Please do not write in shaded areas.

				ANALYSIS REQUESTED	
SAMPLING DATE:	April 27,2010	REPORT TO:	Caoimhín P. Connell	1	Methamphetamine
PROJECT Name/No:	Kiowa	COMPANY:	Forensic Applications, Inc.	2	Use entire contents
eMail:	Fiosrach@aol.com	ADDRESS:	185 Bounty Hunters Lane, Bailey, CO 80421	3	
SAMPLER NAME:	Caoimhín P. Connell	PHONE	303-903-7494	4	
				5	
				6	Not Submitted

LAB Number	Sample Number	SAMPLE MATRIX			ANALYSIS REQUESTS						SAMPLER COMMENTS	LAB COMMENTS	No of Containers
		Wipe	Vacuum	Other	1	2	3	4	5	6			
	KMØ4271Ø-Ø1	X			X	X							1
	KMØ4271Ø-Ø8	X			X	X							1
	KMØ4271Ø-12	X			X	X							1
	KMØ4271Ø-20	X			X	X							1

CHAIN OF CUSTODY RECORD | **Wipes Results in:** ☐ µg/100cm² ☒ Total µg | *Total Number of Containers (verified by laboratory)* 4

PRINT NAME	Signature	COMPANY	DATE	TIME	Turnaround Time
Caoimhín P. Connell		FACTs, Inc.	4/28/10	07:30	☐ 24 Hours (2X)
MIA SAZON		ACI	4/29/10	1500	☐ 2 Days (1.75X)
					☐ 3 Days (1.5X)
					☒ Routine

Custody Seals:	Yes	No
Container:	Intact	Broken
Temperature:	Ambient	Cooled
Inspected By:	MIA SAZON	
Lab File No.	10125-02	

Appendix C

Compact Digital Disk
(Photographs and Additional Documentation)