FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

Preliminary Assessment of an Identified Illegal Drug Laboratory

19042 E 53rd Avenue Denver, Colorado

Prepared for:
Metro Brokers (Gollas and Company, Inc.)
4083 East 133rd Circle
Thornton, Colorado 80241

Prepared by:

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

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EXECUTIVE SUMMARY

- An illegal drug lab, as that term is defined in CRS §25-18.5-101, existed at the subject property from August 18, 2005 forward, and continues to exist at the time of this report.

- A Class 1 Public Nuisance, as defined in CRS §16-13-303(1) existed at the subject property from August 18, 2005 forward, and continues to exist at the time of this report.

- "Discovery" and "Notification," as those terms are used in CRS §25-18.5-103(1)(a) were issued on August 18, 2005.

In November 2008, Forensic Applications Consulting Technologies, Inc. (FACTs) performed a State mandated Preliminary Assessment at the subject property. Based on that assessment, FACTs has made the following observations:

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

- To the extent that no cleaning and no final verification sampling has been performed pursuant to mandatory regulation, available evidence conclusively demonstrates that widespread MDMA contamination exists throughout the entire structure excluding the attic.

- Repeated illegal entries were made into the property in violation of CRS §25-18.5-104 and CRS §16-13-308)(I).

- Personal items were illegally removed from the subject property in violation of CRS §25-18.5-103(b).

- The automobile associated with the subject property was illegally removed from the subject property in violation of CRS §25-18.5-103(b).

- In violation of Colorado 6 CCR 1014-3 (4.0) cleaning activities were commenced prior to the performance of a *bona fide* Preliminary Assessment.

- The (unknown) location where personal property was relocated is now contaminated with MDMA, and now poses a significant public health hazard and meets the definition of an illegal drug laboratory pursuant to CRS §25-18.5-101, and a Class 1 Public Nuisance as defined in CRS §16-13-303(1).

- The (unknown) vehicles used to transport the personal property removed from the subject property are now contaminated with MDMA, and now pose a significant public health hazard and meets the definition of an illegal drug laboratory pursuant to CRS §25-18.5-101, and a Class 1 Public Nuisance as defined in CRS §16-13-303(1).

- Entry into the property where the personal items were relocated is therefore now prohibited pursuant to CRS §25-18.5-104.

- The owner of the automobile associated with the property should be identified and informed that the vehicle is potentially contaminated and, according to State regulation, must be assessed pursuant to 6 CCR 1014-3.

- The employees of the companies which illegally entered the property should be notified, in writing, that they entered an uncharacterized, and uncontrolled hazardous waste site as defined in the Code of Federal Regulations Tile 29 Part 1910.120(a)(1)(i), and may have been illegally exposed, by their employer, to a variety of toxic materials, which may have adversely impacted their health.

Timeline

On or about August 18, 2005, the United Stated Drug Enforcement Agency conducted a raid and executed a search warrant at 19042 E 53rd Ave., Denver, Colorado (the subject property). During that action, materials used in the manufacturing of methylenedioxymethamphetamine (MDMA) were discovered in the residence. Also discovered was evidence of MDMA. Pursuant to State regulations, MDMA is covered under the definition of "methamphetamine," and for the purposes of regulation, is indistinguishable from methamphetamine.

On August 18, 2005 the City and County of Denver, Department of Environmental Health, Environmental Protection Division affixed two large placards on the front door of the subject property which explicitly prohibited entry into the residence. The placards remained affixed and clearly legible at the time of our November 2008, site assessment.

Following the discovery and notification of an illegal drug laboratory, pursuant to Colorado regulations, a Property Owner is required to either perform a Preliminary Assessment (as defined by State regulation), or demolish the property.

Following the discovery and notification of an illegal drug laboratory at the subject property, three separate industrial hygiene consultants entered the property and performed non-mandatory sampling. The reports from two of the consultants were available for our review. Neither of the work products met the regulatory elements of a "Preliminary Assessment;" each were fatally flawed and /or incomplete and neither could be used as a Preliminary Assessment.

FACTs was informed that a third consultant (Century Environmental) also performed sampling at the property. Although no documentation was available for review, FACTs is aware of work performed by Century Environmental. On other projects FACTs has performed critical reviews of that company's work, and we have not found the work to meet the elements required of a Preliminary Assessment. In the past, FACTs has provided courtroom testimony stating that the work performed by Century Environmental has not exhibited technical competency and the author of that previous work had no

legitimate training or experience in performing drug lab assessments, as required by regulation.

Following the discovery and notification of an illegal drug laboratory at the subject property, unknown persons illegally entered the property and removed personal belongings in violation of Colorado revised statutes.

Following the discovery and notification of an illegal drug laboratory at the subject property, unknown persons illegally entered the property and cleaned the interior of the property in violation of Colorado revised statutes.

Following the discovery and notification of an illegal drug laboratory at the subject property, T and T Field Services illegally entered the property and performed maintenance in violation of Colorado revised statutes.

The illegal entry into the property interfered with the performance of a Preliminary Assessment as intended by regulation. Therefore, this Preliminary Assessment is made in good faith within the limitation imposed upon FACTs by extant conditions.

REGULATORY REQUIREMENTS

Federal Requirements

All work associated with this Preliminary Assessment was performed in a manner consistent with regulations promulgated by the Federal Occupational Safety and Health Administration (OSHA). All field personnel, including technicians were certified[1] in Clandestine Drug Laboratory entry and assessment.

State Requirements

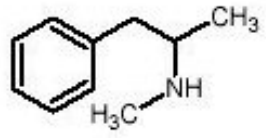
Scope and Application

Contrary to common belief, in Colorado "methamphetamine" is not restricted exclusively to the compound "methamphetamine." Rather, the regulatory definition of "methamphetamine" encompasses all related compounds, and pursuant to State regulations, 6 CCR 1014-3:

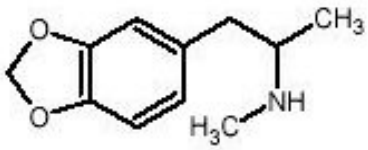
> "*Methamphetamine" means d-methamphetamine, l-methamphetamine, and unidentified isomers of the same, and any racemic mixture of d/l meth, or any mixture of unidentified isomers of methamphetamine. The term includes derivatives, conjugates, oxides and reduced forms of the basic structure associated with CAS registration number 537-46-2. For the purposes of the regulation, this term also includes amphetamine (CAS 300-62-9), ephedrine (CAS 299-42-3), and pseudoephedrine (CAS 90-82-4).*

[1] Certificates of the technician include OSHA 29 CFR 1910.120 Emergency Response (Q); State of Colorado Clandestine Drug Lab Entry (CRCPI, Colorado Division of Public Safety), Rocky Mountain HIDTA, 40 hours Clandestine Laboratory Safety Certification through the US Drug Enforcement Agency (consistent with 40 Hour OSHA HazWoper Training pursuant to Title 29 CFR 1910.120). The technician used for this project has approximately 6 years experience in clandestine drug lab entry.

In this case, law enforcement documents and previous sampling identified the controlled substance known as MDMA ("ecstasy"). The chemical name for MDMA is "3,4-methylenedioxy*methamphetamine.*" The chemical structures for methamphetamine and for MDMA are very similar,[2] (see the figures below):



Methamphetamine



Ecstasy

MDMA is essentially an oxide of CAS registration number 537-46-2; therefore, contamination associated with MDMA meets the definition of "methamphetamine" pursuant to State regulations. In Colorado, State Statutes define an illegal drug lab as:

> *CRS 25-18.5-101(2)*
> *"Drug laboratory" means the areas where controlled substances, as defined by section 18-18-102, C.R.S., have been manufactured, processed, cooked, disposed of, or stored and all proximate areas that are likely to be contaminated as a result of such manufacturing, processing, cooking, disposing, or storing.*

Pursuant to state regulations, the property has risen to the standard of "discovery" of a illegal drug lab as defined by Colorado Revised Statutes §25-18.5-103, "*Discovery of illegal drug laboratory,*" to the extent that information exists from a *cognizant authority* identifying the property as an "illegal drug lab."

Preliminary Assessment

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

The Preliminary Assessment must be conducted according to specified requirements[4] by an authorized Industrial Hygienist as that term is defined in CRS §24-30-1402. This document, and all associated appendices and photographs, is the "Preliminary Assessment" pursuant to those regulations. Included with this discussion is a read-only digital disc (DVD). The disc contains mandatory information and photographs required by State regulation for a Preliminary Assessment. This Preliminary Assessment is not

[2] Fischer, C.; Hatzidimitriou, G.; Wlos, J.; Katz, J.; and Ricaurte, G. *Reorganization of ascending 5-HT axon projections in animals previously exposed to recreational drug 3,4-methelenedioxymethamphetamine (MDMA, "Ecstasy")*. Journal of Neuroscience 15:5476-5485, 1995.
[3] Section 8.26 of 6 CCR 1014-3
[4] Section 4 of 6 CCR 1014-3

complete without the DVD and all associated support documents found in the appendices.

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

Discovery and Notification

Discovery and Notification occurred at the subject property by virtue of the Law Enforcement Actions on August 18, 2005 and posting of placards by the Governing Body (City and County Of Denver, Department of Environmental Health) on August 18, 2005.

Preliminary Hypothesis

During the Preliminary Assessment, the initial hypothesis is made that the subject area is clean and data will be collected to find support for this hypothesis. 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 compels the Industrial Hygienist to accept the null hypothesis and declare the area non-compliant.[5] 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 Preliminary Assessment. According to the State regulations:[6]

> *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.*

Although sampling and "testing" was performed by each of the previous consultants, none of the sampling or analysis was necessary, and none of the sampling provided any new information that was not already easily discernable from available law enforcement and other governmental personnel. The only area where sampling was needed to determine potential contamination was the attic. Based on the available information, FACTs was not able to find where any of the previous consultants sampled the attic. Therefore, the only sample collected by FACTs as part of this PA was from the attic.

[5] This language and emphasis is verbatim from Appendix A (mandatory) of 6 CCR 1014-3
[6] Section 4.6 of 6 CCR 1014-3

Initial Statement on Hypothesis Testing

Regarding this subject property, independent of any testing performed by FACTs or any other consultant, information existed from available law enforcement agencies which indicated the potential for overt contamination. That information confidently challenged the Primary Hypothesis, and compels the Industrial Hygienist to accept the null hypothesis and declare the property non-compliant.

In addition to the law enforcement documents, superfluous sampling and analysis performed by previous consultants conclusively confirmed the presence of overt MDMA contamination at the subject property. On September 29, 2005 a firm called "An Industrial Hygienist" (Herron) performed unnecessary sampling which confirmed the presence of widespread MDMA contamination. On or about April 8, 2007, AG Wassenaar (AGW) also performed unnecessary sampling which similarly confirmed the presence of widespread MDMA contamination. A summary of the confirmation samples is provided in Table 1, below.

Consultant	Location	Result µg/100 cm2
AGW	Master Bedroom wall	0.2
AGW	Powder bathroom	0.2
Herron	Bathroom lavatories (*sic*)	0.3
Herron	Upstairs furniture	0.3
Herron	Dining room walls	0.4
Herron	Upstairs furniture	0.4
Herron	Dining room furniture	0.5
Herron	Bathroom floors	0.7
Herron	Dining room carpet	1.
Herron	Upstairs carpet	1.
Herron	Kitchen counter tops and sink	2.
Herron	Kitchen floor	4.
Herron	Garage walls	5.
Herron	Garage tools and personal items	8.
Herron	Kitchen appliances	8.
Herron	SE Bedroom	11.
AGW	Ventilation system	13.
AGW	Garage	28.
Herron	Detached sink	37.
Herron	Automobile	47.
Herron	Garage floor	97.

Table 1
Confirmatory Cursory Sampling

The totality of the circumstances challenged the hypothesis that contamination was absent from all portions of the subject property. Based on the totality of circumstances, including objective sampling, we were not able to support the initial hypothesis and, therefore, we accept the null hypothesis and declare the structure, excluding the attic, non-compliant.

Elements of the Preliminary Assessment

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

Mandatory 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	NA
§8.9	Contamination migration field form	Report
§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 -§8.19	Not applicable (illegal remediation)	NA
§8.20	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	✓
	Analytical Laboratory Reports	✓
	FACTs final closeout inventory document	NA
	Available Law Enforcement documents (confidential - by reference)	✓
	FACTs Field Sampling Forms	✓

Table 2
Inventory of Mandatory Elements and Documentation

Subject Structure

The residential structure was listed by the Denver County Assessor's Office as a 2,079 square foot dwelling built *circa* 2004.

Adjoining Properties and Land

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

Figure 1
General Site Overview

Review of Law Enforcement Documentation

As part of the Preliminary Assessment, FACTs is required by regulation[7] to review available law enforcement documents pertinent to a subject property. During this project, the City and County of Denver held confidential law enforcement documentation which we reviewed (DEA Case 200541913). FACTs reviewed confidential law enforcement documentation from various Denver Police Officers who had been on site and who had firsthand knowledge of the property. The documentation was identified to FACTs as "confidential" and therefore has been included in this PA by reference only.

[7] 6 CCR 1014-3 (Section 4.2)

County

Governing Body

Based on information provided to FACTs, the "Governing Body" as defined in CRS §25-18.5-101 for this subject property is:
Gene Hook
Environmental Specialist
City and County of Denver
201 West Colfax Ave.
Dept. 1009
Denver, CO 80202

Visual Inspection of the Property

As part of our Preliminary Assessment, on Monday, December 1, 2008, Mr. Caoimhín P. Connell, Forensic Industrial Hygienist performed a visual inspection of the subject property. Pursuant to regulatory requirements, the subject property was assigned into "functional spaces," and an indicia inventory and assessment was performed for each functional space.

The property was essentially in an "unoccupied" condition and had been emptied of all chattels and appliances (in violation of State statutes).

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

Sample Collection

Wipe Sample

The sample collected by FACTs at the subject property comprised of a "discreet" sample. A discreet sample is a single wipe, collected from a single area, and submitted for analysis as a unique location.

The wipe sample was collected in a manner consistent with State regulations. The wipe sample medium was individually wrapped commercially available Johnson & Johnson™ gauze pad. The gauze material was assigned a lot number for quality assurance and quality control (QA/QC) purposes and recorded on a log of results. The pad was moistened with reagent grade methyl alcohol. Each batch of alcohol was assigned a lot number for QA/QC purposes and recorded on a log of results. The sample area was delineated with a measured outline.

The sample was collected by methodically wiping the entire surface of the selected area (a metal exhaust stack in the attic) with moderate pressure; first in one direction and then in the opposite direction, folding the gauze to reveal fresh material as necessary. The

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

Collection Rationale

It is a common misconception that the Industrial Hygienist is required to collect samples during a Preliminary Assessment of an illegal drug lab. However, no such requirement exists in Colorado. Rather, regarding identification of contamination, the regulations state:

> 4.6 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;…

Similarly, 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 based on the existing Preliminary Assessment, in the absence of all other information. During a Preliminary Assessment, there is no *de minimis* concentration of MDMA below which a statement of compliance can be made in the absence of final verification sampling.

The data quality objectives of the sample collected by FACTs during the Preliminary Assessment was to determine, within the context of the regulation, whether or not MDMA had migrated into the attic.

Overall, the samples indicate widespread, significantly elevated MDMA contamination throughout the entire residential structure including the garage and the ventilation system, but excluding the attic.

QA/QC Precautions

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

Field Blanks

Due to the nature of the data quality objectives, in light of the totality of information available for this subject property, field blanks were not required, and none were collected or reported. Nevertheless, FACTs maintains a log of blank samples and materials, to ensure that reported contamination is not due to problems with the sampling materials. Furthermore, the laboratory reports instrument and reagent blanks to ensure that reported MDMA is not due to reagent contamination or contamination due to poor handling (such as that seen in the Herron samples).

Cross Contamination

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

Laboratory 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 1.0 µg (RPD 4%, recovery =104%); Matrix spike 0.10 µg (RPD 4%; recovery 93%); Surrogate recovery 92%. The QA/QC indicate the data met the data quality objectives.

Sample Locations

In the figures that follow, the approximate sample locations have been presented. The exact locations of the Herron samples are not known. The locations of the AGW samples are approximated. The sample collected by FACTs is designated "F1." The drawings are stylized and not to scale. In the diagrams, the sample locations are indicated by triangles.

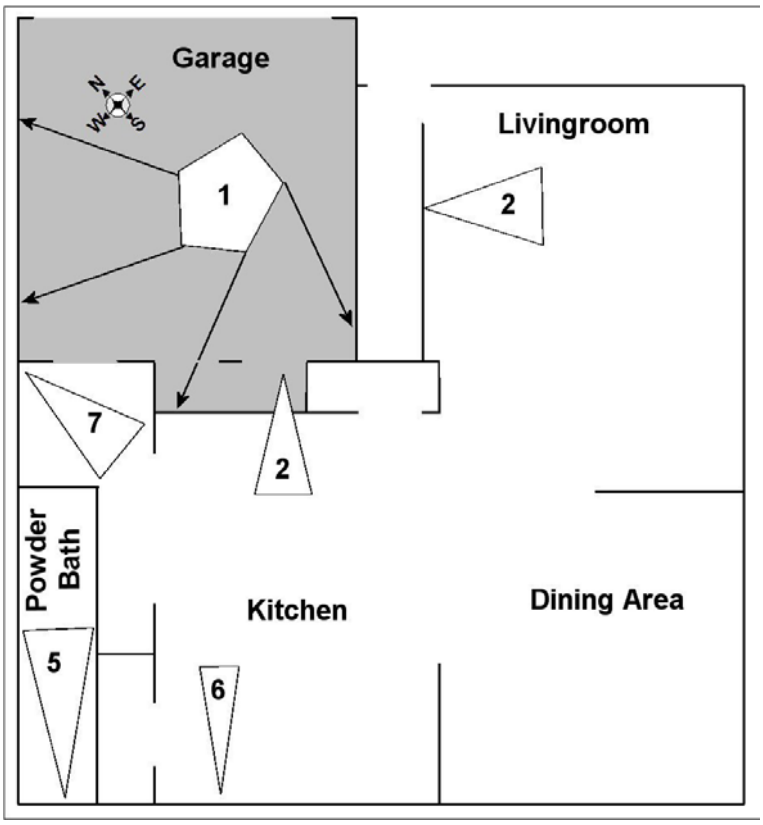


Figure 2
Sample Locations Main Floor

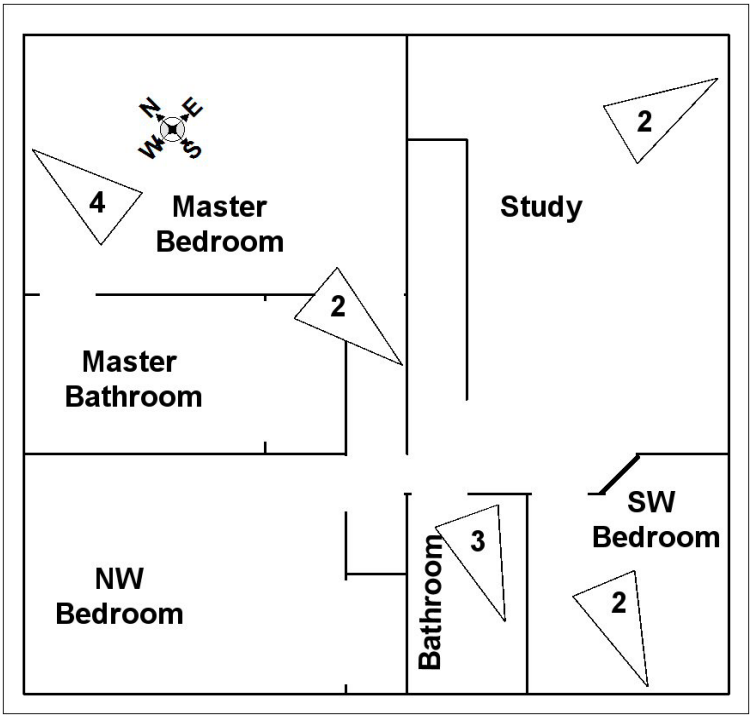


Figure 3
Second Floor Samples

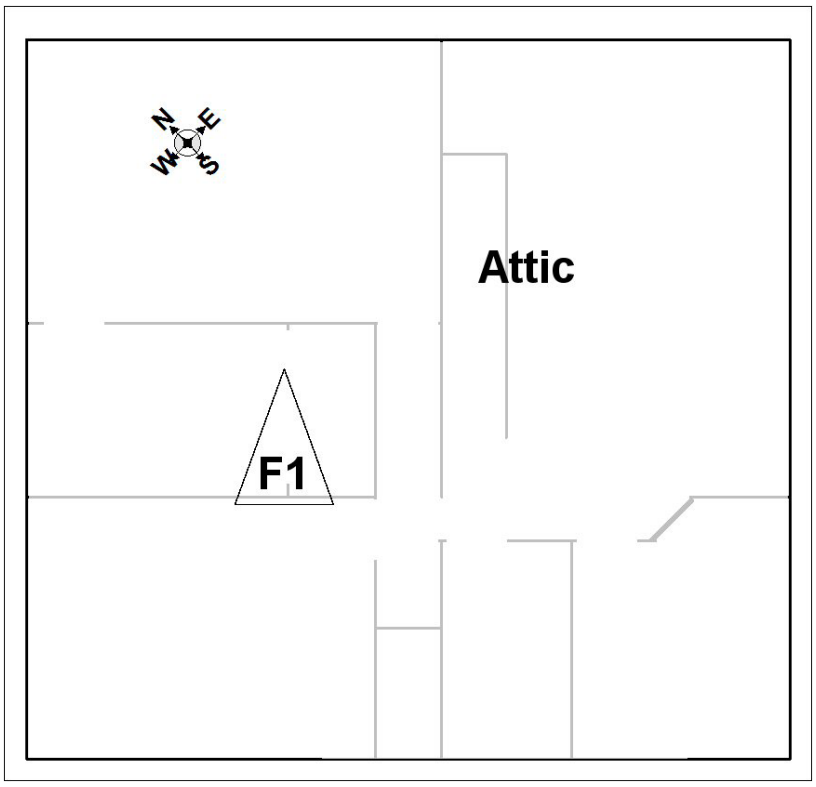


Figure 4
Attic Sample

Identification of Cook/Storage Areas

Based on the law enforcement documents, MDMA was synthesized in the garage. Although law enforcement documents identify the "Wacker Method," the Wacker Process is not specific to the production of MDMA, but rather describes a catalyst enhanced oxidation. Based on the best information available, and discussions with a DEA agent involved in the case, the synthesis process was probably a safrole/ P-2-P method, which may, or may not involve the Wacker Process.

Identification of Contamination Migration

Air within a structure communicates, to some extent, with all other areas within that structure.[8] Airborne contaminants therefore, similarly, have the potential for migration, following the paths of air movement. Walls and floors may either act as partial barriers or enhance migration by acting as migration conduits. Air migration patterns within a structure is extremely complex and difficult to quantify with certainty. In this case, there is no indication that measureable fugitive emissions occurred to the attic or to adjoining properties.

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

Furthermore, there was no indication that waste materials were deposited outside. As stated in the Executive Summary, personal belongings were illegally removed from the property in an uncontrolled fashion, and relocated to other unknown properties. The personal belongings from the property were heavily contaminated, and that contamination was delivered to the location where the property was taken. The (unknown) location where the personal property was relocated is now contaminated with MDMA, and now poses a significant public health hazard and meets the definition of an illegal drug laboratory pursuant to CRS §25-18.5-101, and a Class 1 Public Nuisance as defined in CRS §16-13-303(1).

Similarly, the (unknown) vehicles used to transport the personal property are now contaminated with MDMA, and now pose a significant public health hazard and meets the definition of an illegal drug laboratory pursuant to CRS §25-18.5-101, and a Class 1 Public Nuisance as defined in CRS §16-13-303(1).

The vehicle remaining at the property similarly would have been a rout of contamination migration.

Pursuant to State statutes:

> CRS §25-18.5-103(3) A person who removes personal property or debris from a drug laboratory shall secure the property and debris to prevent theft or exposing another person to any toxic or hazardous chemicals until the property and debris is appropriately disposed of or cleaned according to board rules.

The persons who removed the property were exclusively responsible for ensuring compliance with this mandatory State statute.

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.[9]

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:

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

Functional Space Number	Describe the functional space (See drawings for delineating structural features)
1	Living Room and Dining Room
2	Kitchen, Kitchen Pantry and Kitchen Closet
3	Powder Bathroom
4	Laundry
5	Garage and Furnace Closet
6	Stairs, Study, and Closet
7	South West Bedroom
8	Upstairs Bathroom
9	NW Bedroom
10	Master Bedroom
11	Master Bathroom
12	Master Closet
13	Attic

Table 3
Functional Space Inventory

Structure Number 1- Residence

Functional Space 1: Living Room and Dining Room

This area is on the ground floor and is defined as those terms are commonly known. Four wipe samples were collected from this area by the previous consultants, and each conclusively demonstrated the presence of MDMA. The Dining area is contiguous to the Kitchen and the Living Room. The front door of the residence exhibited signs of forced entry.

Functional Space 2: Kitchen

This space is defined as that term is normally used; FACTs observed yellow staining on the counter tops in this room. Previous consultants collected three samples from this area, which indicated overt MDMA contamination.

Functional Space 3: Powder Bathroom

The Powder Bathroom is the small toilet room toward the back of the Kitchen area. A sample collected from this area was conclusive for the presence of MDMA. In this area, as well as others, the wipe sample indicated a concentration of 0.2 µg/100 cm2. Many people erroneously believe that the data would indicate the area should be excluded from remediation.

However, in reality, for <u>all</u> sampling and analytical methods, there is a specific uncertainty associated with the analysis. Therefore, for any reported laboratory value, there is a *probability* that the true result is greater than the reported value (Upper Confidence Limit, UCL), or less than the reported value (Lower Confidence Limit, LCL).

A laboratory result, therefore, represents a *probable* result in between two confidence limits and may be depicted thus:

The reported value (RV) lies somewhere in between two possible "true" values, the UCL and the LCL.

Compliance and the decision to remediate or not remediate is based not only on the reported value, but also on the statistical uncertainty of the results. So, in the drawing below, where the reported value (A) and the LCL are greater than the decision threshold (the horizontal line), we are *confident* the reported value indicates noncompliance. Where the reported value (D) and the UCL are less than the decision threshold, we are *confident* the reported value indicates compliance.

However, there is an ambiguous zone of reported values, such as (B), where although the reported value is greater than the decision threshold, there is a probability the true value is less than the decision threshold. Similarly, (C), where the reported value is less than the decision threshold, such as the case of the sample taken from the Powder Bathroom, there is a finite probability the true value is greater than the decision threshold.

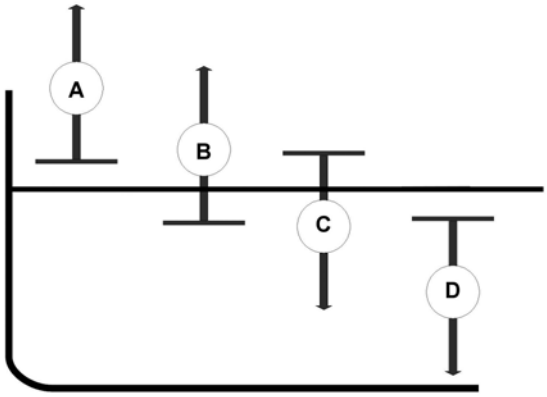


Figure 5
Uncertainty in Reported Values

Standard industrial hygiene sampling protocols require that the Industrial Hygienist consider this degree of uncertainty, known as the total coefficient of variation (Cv_T), for each method. The Cv_T includes the uncertainty associated with both the sampling and analytical processes. For many methods, the degree of uncertainty is known and published.

For field MDMA sampling and analysis, the statistical uncertainty has yet to be fully characterized. However, when we analyzed the field data from the subject property, we see that the variation of sampling results, as an whole, exhibits a lognormal distribution.[10] The sampling error (which speaks to the heterogeneous distribution of contamination at the subject property) is very large, and the Geometric Standard Deviation is 7.2. Therefore, even for a sample result whose apparent result is below a specified quantity (such as 0.5 µg/100 cm2), there is a probability that the concentration of MDMA in the Powder Room is in fact greater than compliance levels.

The data for the subject property as an whole indicate that random samples collected from the interior of the subject property will exceed the State mandated threshold about 89% of the time.

Standard Industrial Hygiene protocols typically use the 95% confidence intervals to determine the possible "spread" of the laboratory results about the true value. As such, where the Cv_T is known, the IH calculates the UCL and LCL and determines if the UCL is greater than or less than the Decision Threshold.[11]

In this case, we see that the variance in the sample set is large, and therefore, although the reported numerical value of six of the samples was less than the often cited 0.5 µg/100 cm2, based on the best available sampling error information, the error is such that the UCL for each of those data are greater than the cited value.

Our role as Industrial Hygienists is to ensure that public health is protected, and we believe that we are obligated to err on the side of the highest standard of care, and report that the sample results actually indicate widespread non-compliance for the structure. Our position is supported by the fact that from a regulatory perspective, the Industrial Hygienist is required to establish, as his second hypothesis, the position a particular area is noncompliant and set out to prove, with reasonable care, that hypothesis. State regulations which state:[12]

> The protocol is not a substitute for professional judgment, but must be utilized by cognizant professionals in the application of their professional skills. Neither is the method a "cook-book" recipe that if followed, decontamination is guaranteed, and risks are assumed to be zero. The evaluation of any specific area must necessarily be based on the totality of the circumstances.

As such, our professional judgment is that there is sufficient evidence to conclude that unacceptable concentrations of contamination exist in all of the subject property, and therefore, the wipe sample from this area (and those from other functional spaces in this

[10] The Shapiro-Wilk W goodness of fit test is 0.9288.

[11] For this data set, for W= 0.9288 (µ=12.6), UCL=22.6, LCL=2.6.

[12] 6 CCR 1014-3, Attachment to Appendix A

structure whose values are less than the decision threshold) do not provide evidence of relief from the need for remediation.

Functional Space 4: Laundry

The laundry room is a small room between the garage and the kitchen. The washing machine and the clothes dryer had been removed in violation of Colorado State statutes.

Functional Space 5: Garage

The garage is used here as that term is commonly known. Also housed exclusively within this functional space is the hot water heater and furnace closet. This is the area wherein Law Enforcement personnel with whom we spoke indicated the cook area was located.

Samples collected by the previous consultants each confirmed what was already discernable from the available documentations; viz, there was widespread contamination in the area.

Functional Space 6: Stairs, Study and Study Closet

This space is the living area directly above the Living room. This functional space is the large open area at the top of the stairs.

Functional Space 7: SW Bedroom

This space is defined as that term is commonly known and delineated by the walls describing the room.

Functional Space 8: Upstairs Bathroom

The upstairs bathroom is a full toilet and bathroom.

Functional Space 9: NW Bedroom

The NW Bedroom contains the access to the attic, and is defined by the wall describing the room.

Functional Space 10: Master Bedroom

The Master bedroom lies directly above the garage, and is defined by the wall describing the room. The Master Bathroom is exclusively accessible from the Master Bedroom.

Functional Space 11: Master Bathroom

This functional space is defined as that term is commonly used but also contains an unusually large closet that poses a separate contamination potential.

Functional Space 12: Master Bathroom Closet

This space is an unusually large closet located in the Master Bathroom.

Functional Space 13: Attic

This was the only space in the structure for which no other information regarding potential for contamination was available. Therefore, FACTs collected a wipe sample from this area to determine the potential for fugitive emissions into this space. Based on this sample, and the fact that the space is not contiguous to any other location in the property, and on the lack of visual indicators that the attic had been entered since the construction of the residence, FACTs has excluded this space from remediation process.

Furnace

Although arguably not a functional space *per se*, the samples collected from the furnace, ventilation duct interiors, and vent exteriors indicated that MDMA contamination in the system was significantly elevated.

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

The results of the furnace samples alone would lead a reasonable person, trained in aspects of meth laboratories, to conclude the *presence* of widespread elevated MDMA 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 MDMA existed on all personal belongings in the residence and continues to exist throughout the residence even in areas that have not been confirmed as contaminated by sampling.

EXTERIOR GROUNDS

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

SEWERAGE SYSTEM

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

CONCLUSIONS

Based on the totality of the circumstances, including our subjective observations and objective data from sampling, we find that there is insufficient evidence to support the preliminary hypothesis that the property was compliant, and we therefore, are required by regulation to accept the null hypothesis and conclude that widespread MDMA contamination exists throughout the residential structure of the subject property.

During our interviews with the Governing Body for this subject property, FACTs expressed the interpretation that the illegal cleaning that was performed was not performed pursuant to mandatory protocols, and was not performed pursuant to a specified Preliminary Assessment (since no legitimate Preliminary Assessment exists for the property). It was, therefore, FACTs opinion that the illegal cleaning of the property cannot be used for compliance purposes. The Governing Body agreed with the conclusion, and therefore, proper cleaning, by a qualified remediation contractor is **required** by State Statutes, and State Regulations.

Based on our observations, the entire residence, including the garage, but excluding the attic, must be subjected to thorough remediation consistent with the regulatory requirements.

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

RECOMMENDATIONS

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

Universal Site Requirements

1. If the carpets are removed, 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 drug lab decontamination, as required by State regulations, should be contracted for the decontamination work. All work performed at the residence should be conducted by an experienced contractor whose employees are documented to have been

properly trained in accordance with 29 CFR §1910.120 and Colorado Revised Statute §25-18.5-104; *Entry into illegal drug laboratories*.

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

5. We recommend that a decontamination corridor with showers be established initially at the front door.

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 City and County of Denver Department of Health and Environment.

8. Discovery of any controlled substances shall be immediately reported to the Denver Office of the DEA.

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

10. The contractor *shall* be contractually obligated to perform personnel air monitoring for MDMA for at least one full shift employee per day to allow for support of proper PPE selection.

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

12. Any contractors (and their subcontractors) should be contractually obligated, through a written contract, to decontaminate the subject property to below the statutory limits. Any recleaning required by a contractor (or their subcontractor) pursuant to a failed final assessment should be contractually obligated to be performed at the expense of the contractor.

13. Contractors should be contractually obligated to cover industrial hygiene costs of return visits and sample expenses as a result of a failed final clearance(s).

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

15. Following the decontamination process, and prior to the final clearance sampling by the Industrial Hygienist, the remediation contractor/subcontractor shall be contractually obligated to collect a minimum of three QA/QC wipe samples from the subject property, as part of their own QA program, and submit those samples

for MDMA 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.

16. If the contractor's three 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.

17. Once the contractor's samples indicate the contamination has been sufficiently reduced, the Industrial Hygienist shall perform final clearance sampling according to 6-CCR 1014-3.

Decontamination of The Residence

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

The following decontamination process should take place in this order:

1. Establish negative pressure pursuant to State regulations.

2. The contractor shall be required to monitor the negative pressure at all times and ensure that the negative pressure (pressure differential) between the work area and adjoining properties, is not less than 0.02 inches of water column at all times.

3. Exhaust from the negative enclosure may take place at any exterior location.

4. No work, except as needed to establish critical barriers shall begin until negative pressure is established.

5. Negative pressure must be maintained at all times until final sampling has been completed and the written intent to issue a Decision Statement has been issued to the contractor by the consulting Industrial Hygienist.

6. Window coverings (window blinds) should be discarded.

7. All bathroom exhaust fans shall be removed from their housing, and thoroughly cleaned.

8. Carpeting and associated padding should be removed and discarded. However, the contractor is encouraged to provide a proposal for steam-cleaning the carpet, and allowing the carpet to remain. If the carpet remains, it will be subjected to

final clearance sampling in accordance with standard industrial hygiene microvacuum sampling procedures.[13]

a. The interpretation of the results of the vacuum samples takes into account the surface area sampled, and the mass of material removed from that surface. The laboratory will be instructed to weigh and report the mass of debris recovered from the cassette, along with the total mass of MDMA in that debris. From this information, FACTs will calculate and report a "density" of MDMA. The "density" used here is expressed in units of micrograms of MDMA recovered per milligram of removable material, per unit area of surface (µg/mg/cm2) and is designated with the Greek letter rho (ρ). There are no regulatory guidelines by which we may compare densities; the interpretation of the data is exclusively within the realm of professional judgment of the Industrial Hygienist. In our opinion, based on our database of samples from previous methamphetamine (or MDMA) contaminated properties, FACTs has set a qualified density "threshold of concern" of 0.5 ρ. That is, if the MDMA density in the carpet exceeds 0.5 ρ, FACTs will make the unqualified statement that in the absence of conflicting information, the material requires further decontamination. The value of "0.5" in this case, has no association with the State mandated decision threshold of 0.5 µg/100cm2 – the resemblance of the two values is purely coincidental.

9. <u>All</u> surfaces in the entire interior space (excluding the attic), including all ceilings, all hanging fixtures, all cabinets (interior and exterior surfaces), all shelving, all floors, doors, hinges, bathtubs, sinks, appliances (interior and exterior surfaces), and every other interior surface whether specifically mentioned or not, shall be thoroughly wiped down to remove residual contamination.

Enclosures: One CD; Data package, and Appendices

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

Appendices

Supporting Documents

Appendix A

Field Forms

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

FACTs project name: 19042 E 53rd Ave	Form # ML1
Date: Dec. 1, 2008	
Reporting IH:	Caoimhín P. Connell, Forensic IH

PROPERTY DESCRIPTION:

Physical address	**19042 E 53rd Avenue, Denver, CO, 80249-8443**
Legal description or VIN	**Parcel Number: 00153-05-003-000, Green Valley Ranch Filing #37, Block 15, Lot 3, Tax District 419M**
Registered Property Owner	**Owner:** **Cameron Joseph Bartley** **19042 E 53rd Avenue, Denver, CO, 80249-8443** **Co-owner:** **Countrywide Bank NA** **400 Countrywide Way SV 35** **Simi Valley, CA 93065**
Number of structures	**One**
Type of Structures (Each affected structure will need a "Functional Space" inventory)	1: Residence 2,079 Square feet
Adjacent and/ or surrounding properties	1: North - Open field 2: South – Single dwelling residence 3: East – Paved roadway 4: West - Single dwelling residence
General Property Observations	**Empty, fair to good condition**
Presumed Production Method	**Safrole, P-2-P production**

Plumbing Inspection and Inventory

FACTs project name: 19042 E 53rd Ave	Form # ML2
Date: Dec. 1, 2008	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Functional Space	Room	Fixture	Indicia?	Comments
3	Bathroom # 1	Toilet	Unk	Interference by T&T Field Services
3	Bathroom # 1	Sink	Unk	Interference by T&T Field Services
8	Bathroom # 2	Sink	Unk	Interference by T&T Field Services
8	Bathroom # 2	Toilet	Unk	Interference by T&T Field Services
8	Bathroom # 2	Bath	Unk	Interference by T&T Field Services
8	Bathroom # 2	Shower	Unk	Interference by T&T Field Services
11	Bathroom # 3	Sink	Unk	Interference by T&T Field Services
11	Bathroom # 3	Toilet	Unk	Interference by T&T Field Services
11	Bathroom # 3	Bath	Unk	Interference by T&T Field Services
11	Bathroom # 3	Shower	Unk	Interference by T&T Field Services
5	Garage	Slop sink	Yes	Staining
2	Kitchen	Sink	Unk	Interference by T&T Field Services

Ventilation Inspection and Inventory

Item	Y/N	Indicia ?	Sampled ?	Comments
Isolated AHU?	Y	Y	Y	xxxxxxxxxxxxxxxxxxxx
Common air intake?	N	NA		xxxxxxxxxxxxxxxxxxxx
Common bathroom exhausts?	N			
Forced air system?	Y			
Steam heat?	N			
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	Y	Y	xxxxxxxxxxxxxxxxxxxx
Pressurized structure?	N	NA		xxxxxxxxxxxxxxxxxxxx

FUNCTIONAL SPACE INVENTORY

FACTs project name: 19042 E 53rd Ave	Form # ML3
Date: Dec. 1, 2008	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Structure Number	Functional Space Number	Indicia (Y/N)	Describe the functional space (See drawings for delineating structural features)
1	1	Y	Living Room and Dining Room
1	2	Y	Kitchen, Kitchen Pantry and Kitchen Closet
1	3	Y	Powder Bathroom
1	4	Y	Laundry
1	5	Y	Garage and Furnace Closet
1	6	Y	Stairs, Study, and Closet
1	7	N	South West Bedroom
1	8	Y	Upstairs Bathroom
1	9	Y	NW Bedroom
1	10	Y	Master Bedroom
1	11	Y	Master Bathroom
1	12	N	Master Closet
1	13	N	Attic

Law Enforcement Documentation

FACTs project name: 19042 E 53rd Ave	Form # ML4
Date: Dec. 1, 2008	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Inventory of Reviewed Documents	1: Narratives associated with Case #200541913 2: DPD File MK-05-0089
Method(s) of production	Safrole/P-2-P
Chemicals identified by the LEA as being present	Acetone #1 — Garage Acetone #2 — Garage Acetone #3 — Garage Biphasic fluid — Garage Brown liquid — Garage Clear liquid #1 — Garage Clear Liquid #2 — Garage Cloudy liquid #1 — Garage Cloudy liquid #2 — Garage Green liquid — Garage HgCl2 — Garage Hydrochloric acid — Garage MeOH — Garage NaOH — Garage Palladium — Garage White powder #1 — Garage White powder #1 — Garage White powder in baggie — Garage Xylenes #1 — Garage Xylenes #2 — Garage Yellow liquid — Garage Brown liquid — Master bathroom Clear liquid #1 — Master bathroom Clear liquid #2 — Master bathroom Clear liquid #3 — Master bathroom HgCl2 — Master bathroom NaOH — Master bathroom OTCs — Master bathroom Red/White Capsules — Master bathroom White chunky powder — Master bathroom White residue #1 — Master bathroom White residue #2 — Master bathroom
Cooking areas identified	Garage (confirmed); Master Bedroom (possible)
Chemical storage areas identified	Garage and Master Bathroom
LE Observation on areas of contamination or waste disposal	Materials, reagents, precursors and waste products in the garage and in the master bathroom

FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

November 24, 2008

Gerhard B. Kriedermann
Environmental Specialist
City and County of Denver
201 West Colfax Ave.
Dept 1009
Denver CO 80202

Via Email: Gerhard.kriedmann@ci.denver.co.us

Dear Mr. Kriedermann:

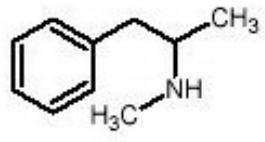
Forensic Applications, Inc. has been contracted to perform a "Preliminary Assessment" an illegal clandestine drug lab pursuant to Colorado Board Of Health Regulations 6-CCR-1014-3, and CRS §25-18.5-101 *et seq*. The property is located in the City of Denver at:

19042 E 53rd Ave., Denver, Colorado

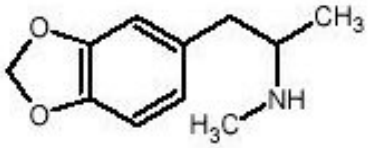
The property owner's representative has informed us that the lab was identified to them as an "ecstasy lab." As you are aware, in Colorado "methamphetamine" is not restricted exclusively to the compound "methamphetamine." Rather, the regulatory definition of "methamphetamine" encompasses all related compounds, and pursuant to State regulations, 6 CCR 1014-3:

> "*Methamphetamine" means d-methamphetamine, l-methamphetamine, and unidentified isomers of the same, and any racemic mixture of d/l meth, or any mixture of unidentified isomers of methamphetamine. The term includes derivatives, conjugates, oxides and reduced forms of the basic structure associated with CAS registration number 537-46-2. For the purposes of the regulation, this term also includes amphetamine (CAS 300-62-9), ephedrine (CAS 299-42-3), and pseudoephedrine (CAS 90-82-4)*.

The chemical name for "ecstasy" is "3,4-methylenedioxy*methamphetamine.*" The chemical structures for methamphetamine and for MDMA are very similar,[1] (see the figures below):



Methamphetamine



Ecstasy

MDMA is essentially a dioxy conjugate of CAS registration number 537-46-2; therefore, contamination associated with MDMA meets the definition of methamphetamine pursuant to State regulations.

[1] Fischer, C.; Hatzidimitriou, G.; Wlos, J.; Katz, J.; and Ricaurte, G. *Reorganization of ascending 5-HT axon projections in animals previously exposed to recreational drug 3,4-methelenedioxymethamphetamine (MDMA, "Ecstasy")*. Journal of Neuroscience 15:5476-5485, 1995.

As you are aware, as part of the Preliminary 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 offices and review any available information there.

We would like to determine and if possible, and convenient to you, obtain copies of any narratives or documentation regarding controlled substances or hazardous materials responses, or speak with any personnel who may be familiar with the property. We are only interested in issues involving controlled substances or hazardous materials responses. If no such records are available please let us know and we will merely make that notation in our report.

We anticipate performing the on-site assessment on December 1, 2008, and will need to review documents before then. We apologize for the short notice, however, we generally do not have any control over the timeframes involved.

Forensic Applications takes extreme caution to protect all Law Enforcement Sensitive information. When requested by the Law Enforcement Agency, we do NOT reveal names, document identities, or include any information considered sensitive by an investigating agency. We have developed a close working relationship with Law Enforcement personnel across the State of Colorado, and we value and respect that open line of communication.

Sincerely,

Caoimhín P. Connell
Forensic Industrial Hygienist

FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

November 24, 2008

Denver Police Civil Liability Bureau
1331 Cherokee Street,
Room 504
Denver CO 80204

Via Fax: 720-913-7035

To Whom It May Concern:

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

19042 E 53rd Ave., Denver, Colorado

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

We would like to 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 four years. If no such records are available please let us know and we will merely make that notation in our report to the City and County Department of Health.

We will be performing the on-site assessment on December 1, 2008, and will need to review documents before then. We apologize for the short notice, however, we generally do not have any control over the timeframes involved.

Forensic Applications takes extreme caution to protect all Law Enforcement Sensitive information. When requested by the Law Enforcement Agency, we do NOT reveal names, document identities, or include any information considered sensitive by an investigating agency. We have developed a close working relationship with Law Enforcement personnel across the State of Colorado, and we value and respect that open line of communication. I have included my SOQ.

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: 19042 E 53rd Ave	Form # ML5
Date: Dec. 1, 2008	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Indicator	Functional Space	Indicator	Functional Space
Acids	5①	Heating mantle	5①
Aerosol cans	No Comment	Heet (or similar)	No Comment
Alcohols (MeOH, EtOH)	5①	Hydrogen peroxide	No Comment
Ammonia	No Comment	Iodine	No Comment
Ammunition	5①, 10①	Kitty litter	No Comment
Artistic expressions	No Comment	Lead	No Comment
Bags of salt	No Comment	Lithium	No Comment
Bases	5①, 10①	Match components	No Comment
Basters/Pipettes	No Comment	Mercury	5①,10①
Batteries	No Comment	MDMA	1,2,3,4,5,6,7,8,9,10,11
Bi-phasic wastes	5①	Modified coolers	No Comment
Booby traps (trips, triggers)	No Comment	Needles/Syringes	No Comment
Bullet holes	No Comment	Other OTC	No Comment
Burn marks	No Comment	pH papers/indicators	No Comment
Catalysts (non red P)	5①	Phenyl-2-propanone	5①
Chemical storage	5①,10①	Pornography, Sex toys	No Comment
Colored wastes	5①,10①	Presence of cats	No Comment
Corrosion on surfaces	No Comment	Pseudoephedrine	No Comment
Drug paraphernalia	No Comment	Red P	No Comment
Drug (unknown/suspected)	10①	Red staining	2, 5
Empty OTC Containers	No Comment	Smoke detectors disabled	No Comment
Electronic hook ups (unusual)	2,6,7	Solvents - ketones, etc	5①
Ephedrine	No Comment	Solvents -aromatics	5①
Faeces	No Comment	Squalor	No Comment
Filters	No Comment	Staining on floors	5①,6,7,9,
Forced entry marks	1,	Structural damage/modifications	No Comment
Gas cylinders	No Comment	Urine containers	No Comment
Gerry cans	No Comment	Weapons	5①,10①
Glassware	5①	Yellow staining	5

Notes

① As reported by others (credible witnesses, Law Enforcement, etc).

Individual Sewage Disposal System Field Form

FACTs project name: 19042 E 53rd Ave	Form # ML7
Date: Dec. 1, 2008	
Reporting IH:	Caoimhín P. Connell, Forensic IH

	Yes	No	N/C
Does the property have an ISDS		X	
Is there unusual staining around internal drains	①		
Are solvent odors present from the internal drains	①		
Are solvent odors present from the external sewer drain stacks			X
Was the septic tank lid(s) accessible			NA
Was the leach field line accessible			NA
Was the septic tank or leach field lines opened			NA
Are solvent odors present from the leach field lines (if "yes" see below)			NA
Are solvent odors present from the septic tank (if "yes" see below)			NA
Is "slick" present in the septic tank			NA
Are biphasic (aqueous-organic) layers present in the septic tank			NA
Was pH measured in the septic tank (pH =7 to 8)			NA
Were organic vapors measured in the septic tank (if "yes" see below)			NA
Is there evidence of wastes being disposed down internal drains	①		
Is sampling of the ISDS warranted			NA
Were calawasi/drum thief samples collected from the septic tank			NA

*NC = Not checked

① T&T Field Services interfered with proper evaluation of the plumbing

Qualitative Organic Vapor Monitoring

Hydrocarbon detector model	EnMet Target Series, MOS detector
NA	NA

Location	MOS*	PID*	FID*
NA	NA	NA	NA

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

Pre-Remediation Photograph Log Sheet

FACTs project name: 19042 E 53rd Ave	Form # ML8
Date: Dec. 1, 2008	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Name	Date taken	Name	Date taken
Attic	12/1/2008 12:20	Exterior (9)	12/1/2008 12:37
Attic (2)	12/1/2008 12:20	Exterior (10)	12/1/2008 12:37
Attic (3)	12/1/2008 12:20	Exterior (11)	12/1/2008 12:37
Attic (4)	12/1/2008 12:20	Exterior (12)	12/1/2008 12:38
Attic (5)	12/1/2008 12:20	Exterior (13)	12/1/2008 12:38
Attic (6)	12/1/2008 12:20	Exterior (14)	12/1/2008 12:38
Attic (7)	12/1/2008 12:21	Exterior (15)	12/1/2008 12:38
Attic (8)	12/1/2008 12:21	Exterior (16)	12/1/2008 12:38
Attic (9)	12/1/2008 12:21	Exterior (17)	12/1/2008 12:38
Dining Room	12/1/2008 12:27	Exterior (18)	12/1/2008 12:38
Dining Room (2)	12/1/2008 12:27	Exterior (19)	12/1/2008 12:39
Dining Room (3)	12/1/2008 12:27	Exterior (20)	12/1/2008 12:39
Dining Room (4)	12/1/2008 12:27	Exterior (21)	12/1/2008 12:39
Dining Room (5)	12/1/2008 12:28	Exterior (22)	12/1/2008 12:39
Doc inside property	12/1/2008 12:25	Exterior (23)	12/1/2008 12:39
Doc inside property (2)	12/1/2008 12:25	Exterior (24)	12/1/2008 12:40
Exterior	12/1/2008 12:36	Exterior (25)	12/1/2008 12:40
Exterior (2)	12/1/2008 12:36	Exterior (26)	12/1/2008 12:40
Exterior (3)	12/1/2008 12:36	Exterior (27)	12/1/2008 12:40
Exterior (4)	12/1/2008 12:36	Exterior (28)	12/1/2008 12:40
Exterior (5)	12/1/2008 12:36	Exterior (29)	12/1/2008 12:41
Exterior (6)	12/1/2008 12:37	Exterior (30)	12/1/2008 12:41
Exterior (7)	12/1/2008 12:37	Exterior (31)	12/1/2008 12:41
Exterior (8)	12/1/2008 12:37	Exterior (32)	12/1/2008 12:41

Pre-Remediation Photograph Log Sheet

FACTs project name: 19042 E 53rd Ave	Form # ML8
Date: Dec. 1, 2008	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Name	Date taken
Exterior (33)	12/1/2008 12:42
Exterior (34)	12/1/2008 12:42
Exterior (35)	12/1/2008 12:42
Exterior (36)	12/1/2008 12:42
Exterior (37)	12/1/2008 12:42
Exterior (38)	12/1/2008 12:42
Exterior (39)	12/1/2008 12:42
Front door	12/1/2008 12:26
Front door (2)	12/1/2008 12:26
Front door (3)	12/1/2008 12:26
Front door (4)	12/1/2008 12:26
Front door (5)	12/1/2008 12:26
Front door (6)	12/1/2008 12:26
Furnace Room	12/1/2008 12:33
Furnace Room (2)	12/1/2008 12:33
Furnace Room (3)	12/1/2008 12:33
Furnace Room (4)	12/1/2008 12:33
Furnace Room (5)	12/1/2008 12:34
Furnace Room (6)	12/1/2008 12:34
Furnace Room (7)	12/1/2008 12:34
Furnace Room (8)	12/1/2008 12:34
Furnace Room (9)	12/1/2008 12:34
Furnace Room (10)	12/1/2008 12:34
Furnace Room (11)	12/1/2008 12:34

Name	Date taken
Garage	12/1/2008 12:31
Garage (2)	12/1/2008 12:32
Garage (3)	12/1/2008 12:32
Garage (4)	12/1/2008 12:32
Garage (5)	12/1/2008 12:32
Garage (6)	12/1/2008 12:32
Garage (7)	12/1/2008 12:32
Garage (8)	12/1/2008 12:32
Garage (9)	12/1/2008 12:32
Garage (10)	12/1/2008 12:33
Garage (11)	12/1/2008 12:33
Garage (12)	12/1/2008 12:33
Garage (13)	12/1/2008 12:33
Garage (14)	12/1/2008 12:33
Garage (15)	12/1/2008 12:34
Garage (16)	12/1/2008 12:34
Garage (17)	12/1/2008 12:35
Garage (18)	12/1/2008 12:35
Garage (19)	12/1/2008 12:35
IMG_2743	12/1/2008 12:39
Kitchen	12/1/2008 12:28
Kitchen (2)	12/1/2008 12:28
Kitchen (3)	12/1/2008 12:28
Kitchen (4)	12/1/2008 12:28

Pre-Remediation Photograph Log Sheet

FACTs project name: 19042 E 53rd Ave	Form # ML8
Date: Dec. 1, 2008	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Name	Date taken
Kitchen (5)	12/1/2008 12:28
Kitchen (6)	12/1/2008 12:28
Kitchen (7)	12/1/2008 12:28
Kitchen (8)	12/1/2008 12:28
Kitchen (9)	12/1/2008 12:29
Kitchen (10)	12/1/2008 12:29
Kitchen (11)	12/1/2008 12:29
Kitchen (12)	12/1/2008 12:29
Kitchen (13)	12/1/2008 12:29
Kitchen (14)	12/1/2008 12:29
Kitchen (15)	12/1/2008 12:29
Kitchen (16)	12/1/2008 12:29
Kitchen (17)	12/1/2008 12:30
Kitchen (18)	12/1/2008 12:30
Ladder decon	12/1/2008 08:51
Ladder decon (2)	12/1/2008 08:51
Laundry	12/1/2008 12:30
Laundry (2)	12/1/2008 12:30
Laundry (3)	12/1/2008 12:30
Laundry (4)	12/1/2008 12:30
Laundry (5)	12/1/2008 12:30
Laundry (6)	12/1/2008 12:30
Laundry (7)	12/1/2008 12:30
Laundry (8)	12/1/2008 12:31

Name	Date taken
Living room	12/1/2008 12:26
Living room (2)	12/1/2008 12:26
Living room (3)	12/1/2008 12:26
Living room (4)	12/1/2008 12:27
Living room (5)	12/1/2008 12:27
Living room (6)	12/1/2008 12:27
Living room (7)	12/1/2008 12:27
Living room (8)	12/1/2008 12:27
Living room (9)	12/1/2008 12:27
Master Bath	12/1/2008 12:22
Master Bath (2)	12/1/2008 12:22
Master Bath (3)	12/1/2008 12:22
Master Bath (4)	12/1/2008 12:22
Master Bath (5)	12/1/2008 12:22
Master Bath (6)	12/1/2008 12:23
Master Bath (7)	12/1/2008 12:23
Master Bath (8)	12/1/2008 12:23
Master Bath (9)	12/1/2008 12:23
Master Bath (10)	12/1/2008 12:23
Master Bath (11)	12/1/2008 12:24
Master Bath (12)	12/1/2008 12:24
Master Bath (13)	12/1/2008 12:24
Master Bath (14)	12/1/2008 12:24
Master Bed	12/1/2008 12:21

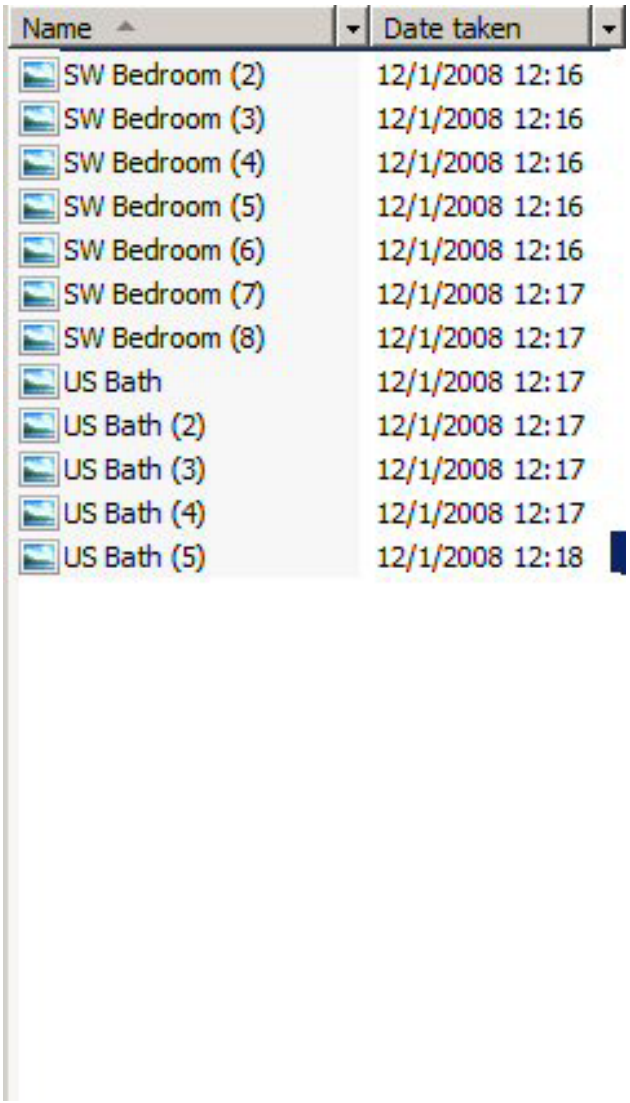
Pre-Remediation Photograph Log Sheet

FACTs project name: 19042 E 53rd Ave	Form # ML8
Date: Dec. 1, 2008	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Name	Date taken
Master Bed (2)	12/1/2008 12:21
Master Bed (3)	12/1/2008 12:21
Master Bed (4)	12/1/2008 12:21
Master Bed (5)	12/1/2008 12:22
Master Bed (6)	12/1/2008 12:22
Master Bed (7)	12/1/2008 12:22
Master Bed (8)	12/1/2008 12:22
Master Bed (9)	12/1/2008 12:22
Master Bed (10)	12/1/2008 12:22
Master closet	12/1/2008 12:23
Master closet (2)	12/1/2008 12:23
Master closet (3)	12/1/2008 12:23
NW Bedroom	12/1/2008 12:18
NW Bedroom (2)	12/1/2008 12:18
NW Bedroom (3)	12/1/2008 12:18
NW Bedroom (4)	12/1/2008 12:18
NW Bedroom (5)	12/1/2008 12:19
NW Bedroom (6)	12/1/2008 12:19
NW Bedroom (7)	12/1/2008 12:19
NW Bedroom (8)	12/1/2008 12:19
NW Bedroom (9)	12/1/2008 12:19
NW Bedroom (10)	12/1/2008 12:19
NW Bedroom (11)	12/1/2008 12:19
Powder Bath	12/1/2008 12:30
Powder Bath (2)	12/1/2008 12:31
Powder Bath (3)	12/1/2008 12:31
Powder Bath (4)	12/1/2008 12:31
Powder Bath (5)	12/1/2008 12:31
Powder Bath (6)	12/1/2008 12:31
Stairs	12/1/2008 12:26
Stairs (2)	12/1/2008 12:26
Study	12/1/2008 12:15
Study (2)	12/1/2008 12:15
Study (3)	12/1/2008 12:15
Study (4)	12/1/2008 12:16
Study (5)	12/1/2008 12:16
Study (6)	12/1/2008 12:16
Study (7)	12/1/2008 12:17
Study (8)	12/1/2008 12:17
Study (9)	12/1/2008 12:25
Study (10)	12/1/2008 12:25
Study (11)	12/1/2008 12:25
Study (12)	12/1/2008 12:25
Study (13)	12/1/2008 12:25
Study closet	12/1/2008 12:18
Study closet (2)	12/1/2008 12:18
Study closet (3)	12/1/2008 12:18
SW Bedroom	12/1/2008 12:16

Pre-Remediation Photograph Log Sheet

FACTs project name: 19042 E 53rd Ave	Form # ML8
Date: Dec. 1, 2008	
Reporting IH:	Caoimhín P. Connell, Forensic IH



Name	Date taken
SW Bedroom (2)	12/1/2008 12:16
SW Bedroom (3)	12/1/2008 12:16
SW Bedroom (4)	12/1/2008 12:16
SW Bedroom (5)	12/1/2008 12:16
SW Bedroom (6)	12/1/2008 12:16
SW Bedroom (7)	12/1/2008 12:17
SW Bedroom (8)	12/1/2008 12:17
US Bath	12/1/2008 12:17
US Bath (2)	12/1/2008 12:17
US Bath (3)	12/1/2008 12:17
US Bath (4)	12/1/2008 12:17
US Bath (5)	12/1/2008 12:18

Post-Remediation Photograph Log Sheet

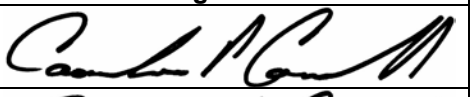
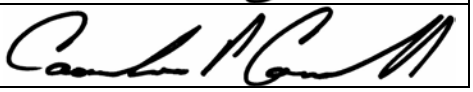
FACTs project name: 19042 E 53rd Ave	**Form # ML9**
Date: Dec. 1, 2008	
Reporting IH:	**Caoimhín P. Connell, Forensic IH**

Not Applicable

Certification, Variations and Signature sheet

FACTs project name: 19042 E 53rd Ave	**Form # ML14**
Date: Dec. 10, 2008	
Reporting IH:	**Caoimhín P. Connell, Forensic IH**

Certification

Statement	Signature
I do hereby certify that I conducted a preliminary assessment of the subject property in accordance with 6 CCR 1014-3, § 4.	
I do hereby certify that the analytical results reported here are faithfully reproduced.	

In the section below, describe any variations from the standard:
Due to site conditions that were heavily altered by illegal entries into the structure, prior to our involvement, FACTs was unable to properly assess the structure for conditions as they existed following notification.

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

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

Signature  Date: Dec. 10, 2008

Forensic Applications Consulting Technologies, Inc.

Consultant Statement of Qualifications

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

FACTs project name:	**E. 53rd Ave**	**Form # ML15**
Date: Dec. 10, 2008		
Reporting IH:	**Caoimhín P. Connell, Forensic IH**	

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

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

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

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

Mr. Connell is also a current law enforcement officer in the State of Colorado, who has conducted clandestine laboratory investigations and performed risk, contamination, hazard and exposure assessments from both the law enforcement (criminal) perspective, and from the civil perspective in residences, apartments, motor vehicles, and condominia. Mr. Connell has conducted over 80 assessments in illegal drug labs, and collected over 1,000 samples during assessments.

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

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

185 Bounty Hunter's Lane, Bailey, Colorado 80421
Phone: 303-903-7494 www.forensic-applications.com

Appendix B

Analytical Reports for FACTs Sample

ANALYTICAL CHEMISTRY INC.

Established in 1979

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

E-mail: aci@acilabs.com Website: www.acilabs.com

Lab Reference:	08164-08
Date Received:	December 3, 1008
Date Completed:	December 5, 2008

December 5, 2008

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

CLIENT REF: Gollas

SAMPLES: wipes/1

ANALYSIS: 3,4 Methylenedioxymethamphetamine (MDMA) by Gas Chromatography-Mass Spectrometry.

RESULTS: in total micrograms (ug)

Sample	***MDMA, ug***	***% Surrogate Recovery***
GM120108 01	< 0.030	92
QA/QC Method Blank	< 0.004	
QC 1.00 ug Standard	1.04	
QA 0.100 ug Matrix Spike	0.093	
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:	12/1/08	REPORT TO:	Caoimhín P. Connell	1	Methamphetamine
PROJECT Name/No:	Go/IAS	COMPANY:	Forensic Applications, Inc.	2	Use entire contents
eMail:	Fiosrach@aol.com	ADDRESS:	185 Bounty Hunters Lane, Bailey, CO 80421	3	
				4	MDMA
SAMPLER NAME:	Caoimhín P. Connell	PHONE	303-903-7494	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			
	~~GMO~~GM120108Ø1	X				X		X					1

CHAIN OF CUSTODY RECORD — **Wipes Results in:** ☐ µg/100cm² ☒ Total µg — **Total Number of Containers** (verified by laboratory): 1

PRINT NAME	Signature	COMPANY	DATE	TIME	Turnaround Time			
Caoimhín P. Connell		FACTs, Inc.	12/1/08	12:43	☐ 24 Hours (2X)	Custody Seals:	Yes	No
MIA SAZON		ACI	12/3/08	1500	☐ 2 Days (1.75X)	Container:	Intact	Broken
					☐ 3 Days (1.5X)	Temperature:	Ambient	Cooled
					☒ Routine	Inspected By:	MIA SAZON	
						Lab File No.	08164-08	

Sampling Field Form

FACTs project name: 19042 E 53rd Ave	**Form # ML17**
Date : Dec. 1, 2008	**Alcohol Lot#: A0802 Gauze Lot#: G0805**
Reporting IH: Caoimhín P. Connell, Forensic IH	**Preliminary X Intermediate____ Final____**

Sample ID GM12Ø1Ø8-	Type	Area/ Volume/ Weight	Location	Func. Space	Dimensions (in.)	Substrate	Result
-Ø1	W		Attic – Metal exhaust stack	13	9X9	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

Appendix C

Selected Documents From Previous Consultants

19042 East 53rd Avenue – Denver, CO 80249
Methamphetamine and MDMA Levels

Location of Sample:	Component:	Meth.:	MDMA:	Sample #
Functional Space #1 - Garage	Concrete floor (~100 cm^2)	<0.030 µg/100 cm^2	97.30 µg/100 cm^2	S092905-01
Functional Space #1 - Garage	Walls	<0.030 µg/100 cm^2	4.89 µg/100 cm^2	S092905-02
Functional Space #1 - Garage	Automobile	<0.030 µg/100 cm^2	46.90 µg/100 cm^2	S092905-03
Functional Space #1 - Garage	Tools and miscellaneous personal belongings (~300 cm^2)	<0.010 µg/100 cm^2	7.80 µg/100 cm^2	S092905-04
Functional Space #1 - Garage	Detached sink (~100 cm^2)	<0.030 µg/100 cm^2	37.00 µg/100 cm^2	S092905-05
Functional Space #2 – First Floor	Kitchen flooring – Linoleum	<0.030 µg/100 cm^2	4.22 µg/100 cm^2	S092905-06
Functional Space #2 – First Floor	Kitchen countertop and sink	<0.030 µg/100 cm^2	2.49 µg/100 cm^2	S092905-07
Functional Space #2 – First Floor	Kitchen stove and refrigerator	<0.030 µg/100 cm^2	8.23 µg/100 cm^2	S092905-08
Functional Space #2 – First Floor	Dining room table, living room coffee table, T.V. (~300 cm^2)	<0.010 µg/100 cm^2	0.53 µg/100 cm^2	S092905-09
Functional Space #2 – First Floor	Dining/living room carpeting	<0.030 µg/100 cm^2	1.07 µg/100 cm^2	S092905-10
Field Blank #1		<0.030 µg	0.39 µg	Blank
Functional Space #2 – First Floor	Dining room/living room walls	<0.030 µg/100 cm^2	0.37 µg/100 cm^2	S092905-11
Functional Space #3 – 2nd Floor	Hard flooring – 2 bathrooms	<0.030 µg/100 cm^2	0.67 µg/100 cm^2	S092905-12
Functional Space #3 – 2nd Floor	Carpeting on 2nd floor	<0.030 µg/100 cm^2	1.12 µg/100 cm^2	S092905-13
Functional Space #3 – 2nd Floor	Wallboard – S.E. bedroom	<0.030 µg/100 cm^2	11.00 µg/100 cm^2	S092905-14
Functional Space #3 – 2nd Floor	Bathroom lavatories (two)	<0.030 µg/100 cm^2	0.30 µg/100 cm^2	S092905-15
Functional Space #3 – 2nd Floor	Furniture: flat screen t.v., couch, cabinet, etc. - (~300 cm^2)	<0.030 µg/100 cm^2	0.44 µg/100 cm^2	S092905-16
Functional Space #3 – 2nd Floor	Furniture: Trinitron t.v., chest of drawers, bed, second bed, etc. (~400 cm^2)	<0.010 µg/100 cm^2	0.34 µg/100 cm^2	S092905-17
Field Blank #2		<0.030 µg	<0.030 µg	Blank

Herron Samples (An Industrial Hygienist, Inc.)

Samples collected by AGW

TABLE III
MDMA SAMPLING RESULTS
19042 East 53rd Avenue
Denver, Colorado
April 6, 2007

Sample ID	Functional Space (FS) Sampled	Sample Type and Area	Laboratory Result (µg/sample)	*Contamination Above Limit
242-01C	Garage	Composite Wipe 500 cm^2	27.6	Yes
242-02C	Ventilation System	Composite Wipe 500 cm^2	12.6	Yes
242-03C	Living Spaces in Home-Second floor hallway bathroom ceiling	Discrete Wipe 100 cm^2	<0.10	No
242-04C	Living Spaces in Home-Second floor master bedroom, west wall	Discrete Wipe 100 cm^2	0.242	No
242-05C	Living Spaces in Home-First floor powder bathroom ledge	Discrete Wipe 100 cm^2	0.218	No
242-06C	Living Spaces in Home-Kitchen wall behind stove	Discrete Wipe 100 cm^2	<0.10	No
242-07C	Living Spaces in Home-Laundry room wall adjacent to garage	Discrete Wipe (duplicate) 100 cm^2	<0.10	No
242-07C-1	Living Spaces in Home-Laundry room wall adjacent to garage	Discrete Wipe (duplicate) 100 cm^2	<0.10	No
242-08C	Field Blank	---	<0.10	No

Legend:
µg/sample = micrograms of MDMA per sample
*Calculated limit for composite samples = 0.10 µg
*Limit for discrete samples is 0.5 µg/100 cm^2 (micrograms per 100 square centimeter of area)

3.0 Decontamination Procedures

The regulatory cleanup level (6 CCR 1014-3, Section 7.0) for samples demonstrating methamphetamine contamination is less than or equal to 0.5 µg/100 cm^2 for discrete wipe samples. Pursuant to the direction from the Denver Department of Environmental Health, AGW has applied the same regulatory level for the analysis of MDMA contamination. This limit is based on the

Appendix D

Compact Digital Disc Photographs