



FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

**Preliminary Assessment
of an
Identified Illegal Drug Laboratory
1059 Mount Werner Circle
Colorado Springs, CO 80906
HUD Case: 052-303207**

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EXECUTIVE SUMMARY

According to Law Enforcement Officials with the El Paso County, Colorado, Sheriff's Office, at an undetermined date in 2003, combined members of the El Paso County Sheriff's Office (EPSO) and the Colorado Springs Police Department (CSPD) conducted a raid on the property located at 1059 Mount Werner Circle, Colorado Springs, CO 80906 (the subject property).

Based on our discussions with members of the (confidential) on-scene Law Enforcement team, and a telephone review of the available law enforcement documents, Forensic Applications Consulting Technologies, Inc. (FACTs) has conclusively determined that a methamphetamine production laboratory existed at the subject property.

Based on our objective sampling, FACTs has conclusively confirmed the presence of widespread and significant contamination throughout the entire residential structure and the heating system in the residential structure including all associated ductwork, and the crawlspace.

This document, and all associated appendices, CD disc and photographs, comprises the complete "Preliminary Assessment" pursuant to State regulations 6 CCR 1014-3.

Pursuant to CRS §25-18.5-105, the subject property is deemed a "public health nuisance." Pursuant to CRS §16-13-303, the subject property and all of its contents is deemed a Class 1 Public Nuisance. As such, the subject property must be remediated according to State Board of Health regulations 6-CCR-1014-3 or demolished (CRS §25-18.5-103). All work must also be compliant with the El Paso County Department of Health Meth Lab Cleanup Regulations.¹

REGULATORY REQUIREMENTS

Pursuant to Colorado State regulations,² a "Preliminary Assessment" of an illegal drug lab must be performed to characterize extant contamination (if any), and to direct appropriate decontamination procedures (if any).

Based on information provided to us by the El Paso County Health Department (EPCHD), the EPCHD is not the Governing Body, as that term is defined in State statutes and does not have the authority to speak for the Governing Body. The EPCHD has informed us they will not enforce the State regulations as written, but rather, they will selectively enforce some of the portions of the regulations, and reject other portions. Although the EPCHD does not have statutory authority to reject any portion of the pertinent mandatory State statutes, neither are they required by State statute to enforce

¹ Attachment "A" to the Regulations Of The El Paso County Board Of Health, Chapter 4 Methamphetamine Laboratory Cleanup Regulations

² State Board Of Health *Regulations Pertaining To The Cleanup Of Methamphetamine Laboratories* 6 CCR 1014-3.



any portion of Title 25 of the CRS, Article 18.5 or the associated *regulations*. Enforcement issues of the current regulations and statutes notwithstanding, the Governing Body has informed us that if an Industrial Hygienist identifies extant contamination, they will enforce all portions of the statutes and regulations.

This preliminary assessment includes quantitative sampling which confirms the presence of widespread methamphetamine contamination at the subject property, and supports Law Enforcement allegations that the subject property was an “illegal drug laboratory” as that term is defined in Colorado Revised Statutes (CRS) §25-18.5-101.

Based on our objective data, the entire occupiable structure, including the crawlspace, and the attic, will require full decontamination by a qualified contractor. The furnace system and all associated ductwork must be decontaminated by a qualified, trained, experienced³ contractor or the furnace system must be entirely removed and/or replaced.

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).

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,” a “Preliminary Assessment” must be conducted at that property. The preliminary assessment must be made according to specified requirements⁴ by an authorized Industrial Hygienist as that term is defined in CRS §24-30-1402.

Discovery and notification can be presumed to officially occur with the issuance of this discussion. From this point forward, the requirements of CRS §25-18.5 and 6-CCR 1014-3 are in effect.

During the preliminary assessment, the hypothesis is made that the subject area is clean, and data will be collected to find support for this hypothesis. Any reliable data that disproves the hypothesis, including police records, visual clues of illegal production, storage, 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.

³ 6 CCR 1014-3, Mandatory Appendix C

⁴ Section 4 of 6 CCR 1014-3

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



Sampling, if it is performed at all, is conducted in the areas with the highest probability of containing the highest possible concentrations of contaminants. 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.

Pursuant to these regulations, information obtained in the preliminary assessment, and those findings, enter the public domain and are not subject to confidentiality.⁷

If the Industrial Hygienist performing the assessment finds *evidence* of contamination, the subject property owner is required to either remediate the subject property or demolish the subject property.⁸

After the subject property has been remediated, an Industrial Hygienist must again perform sampling to quantify the remaining contamination and/or verify that the remediation has reduced the contamination in the subject property to below statutory limits. The second phase of sampling is based on a different hypothesis test, wherein the Industrial Hygienist presumes the property is non-compliant and must attempt to *prove* the property is non-compliant. If, based on the totality of the circumstances, the Industrial Hygienist fails to find sufficient evidence to support the hypothesis of non-compliance, that area shall be deemed to be compliant and the Industrial Hygienist shall issue a decision statement releasing the subject property.

Initial Statement on Hypothesis Testing

Regarding this subject property, information existed from jurisdictional law enforcement that challenged the hypothesis that evidence of methamphetamine related activity was absent from all portions of the subject property. Based on the law enforcement documents alone, there is sufficient evidence to reject the initial hypothesis and declare the property “non-compliant.” The objective sampling further supports the rejection of the initial hypothesis.

⁶ Section 4.6 of 6 CCR 1014-3

⁷ Section 8.26 of 6 CCR 1014-3

⁸ Colorado Revised Statutes §25-18.5-103



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:

Form	DOCUMENT	Included
ML1- App. A	FACTs Property description field form	<i>al</i>
ML2- App. A	Plumbing inspection field form (plumbing system integrity and identification of sewage disposal mechanism)	<i>al</i>
ML2- App. A	Ventilation inspection	<i>al</i>
ML3- App. A	FACTs Functional space inventory field form	<i>al</i>
ML4- App. A	FACTs Law Enforcement documentation field form	<i>al</i>
ML5- App. A	FACTs Field Observations field forms	<i>al</i>
ML6- App. A	FACTs Contamination migration field form (None identified)	
NA	FACTs ISDS field form	N/A
CD	FACTs Pre-remediation photographs	<i>al</i>
ML8- App. A	FACTs Pre-remediation photograph log sheet field form	<i>al</i>
Report	FACTs Drawing of Cook area(s)	<i>al</i>
Report	FACTs Drawing of Storage area(s)	<i>al</i>
Report	FACTs Drawing of Waste area(s)	<i>al</i>
Report	FACTs Drawing General site field form	<i>al</i>
Report	FACTs description sampling procedures, handling, and QA/QC	<i>al</i>
Report	FACTs health and safety procedures used in accordance with OSHA	<i>al</i>
Report	FACTs Analytical Laboratory Documentation Form	<i>al</i>
ML14- App. A	FACTs Certification of procedures, results, and variations from standard practices.	<i>al</i>
ML15- App. A	FACTs SOQs	<i>al</i>
Appendix D	FACTs Analytical Laboratory Reports	<i>al</i>
NA	Available Law Enforcement documents – (Law Enforcement Sensitive; interviewed LEOs but documents not included)	<i>al</i>
ML18- App. A	FACTs Field Data Sheets	<i>al</i>
CD	A description of the analytical methods used and laboratory QA/QC requirements.	<i>al</i>

Table 1
Inventory of Mandatory Information

Included with this discussion on a read-only Compact Digital disc (CD) or DVD. The disc contains mandatory information and photographs required by State regulation for a preliminary assessment. Also included with this assessment is all pertinent documentation associated with the assessment. This Preliminary Assessment is not complete without the disc and all associated support documents.

Review of Law Enforcement Documentation

As part of the Preliminary Assessment, FACTs is required by regulation⁹ to review available law enforcement documents pertinent to a subject property. During this project, the EPSO and the CSPD exhibited the highest level of professionalism and cooperated in every way with the requirements of our Preliminary Assessment.

⁹ 6 CCR 1014-3 (Section 4.2)



We interviewed agents associated with the case (Case Number 0302982), and discussed information contained in the Law Enforcement documents. At the request of CSPD, we have not reported here the names of the officers interviewed.

Governing Body

Although some portions of the ELCDH policy are contrary to State statutes and State regulations, FACTs remains obligated to follow State regulations and State statutes. As such, we have conducted our work pursuant to mandatory State requirements, the EPCDH policies, notwithstanding.

Visual Inspection of the Property

As part of our preliminary assessment, on January 30, 2007, FACTs 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.

In general, upon our arrival, we found the security of the subject property intact. Upon our arrival, all ground floor doors to the residence at the subject property were locked and all windows were boarded with $\frac{3}{4}$ inch plywood. The back door (exterior kitchen door) was bolted with $\frac{3}{4}$ plywood and reinforced with 2X4 timbers.

The exterior gates were unlocked and accessible. During our visit, we located a US Military backpack in the backyard. The backpack was complete with clothing, accessories, military equipment, etc. The backpack had been hidden under the tree in the backyard within the previous 24 hour period prior to our arrival. The CSPD was notified of the finding.

The property was virtually emptied of all chattels, furniture, and major appliances.

The general layout of the building is given in the drawings below; the drawings are not to scale, but are roughly proportional and are an accurate representation of the structure. The numbered triangles represent sampling locations.



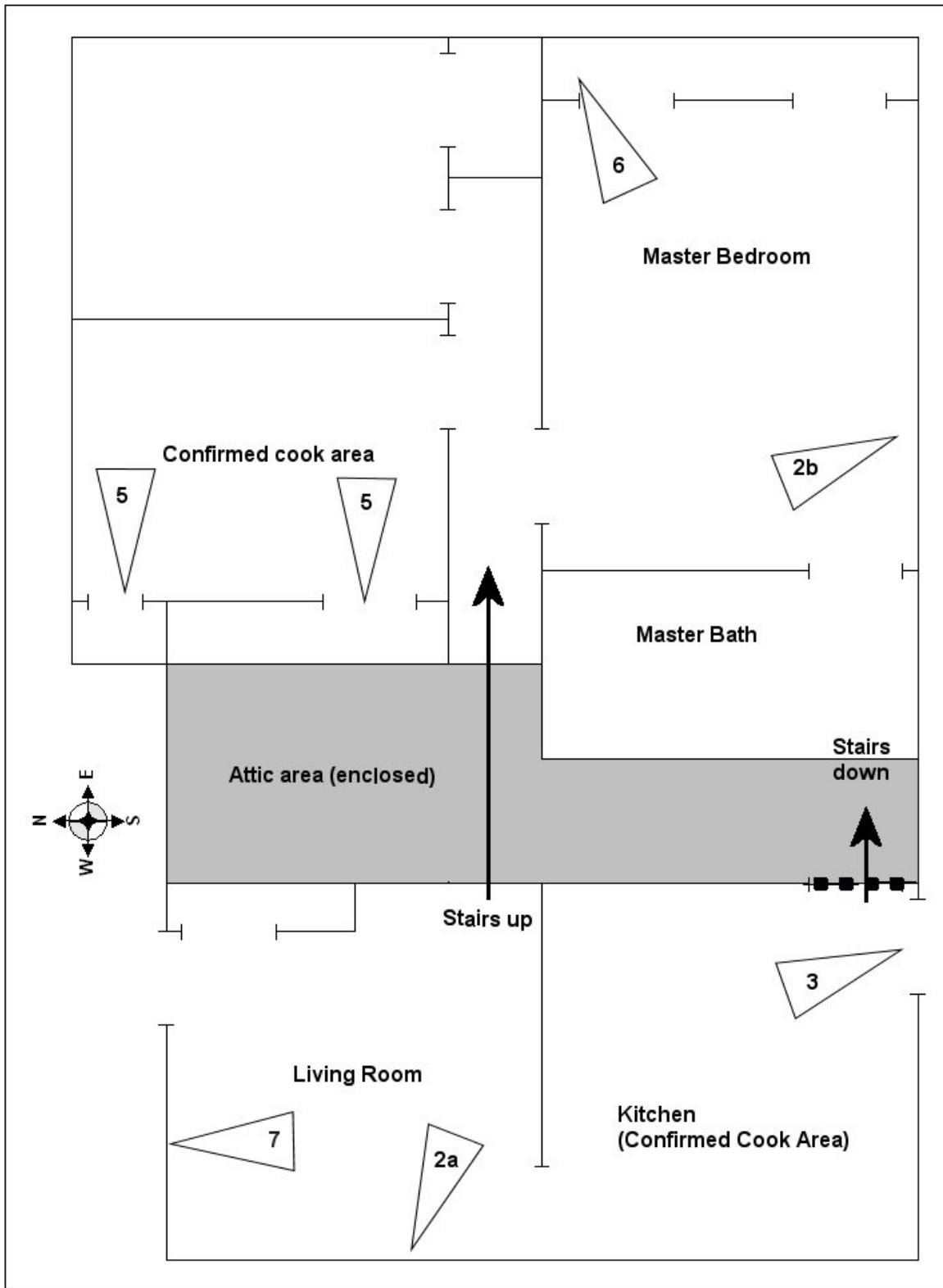


Figure 1
Upstairs Floors – Not to scale



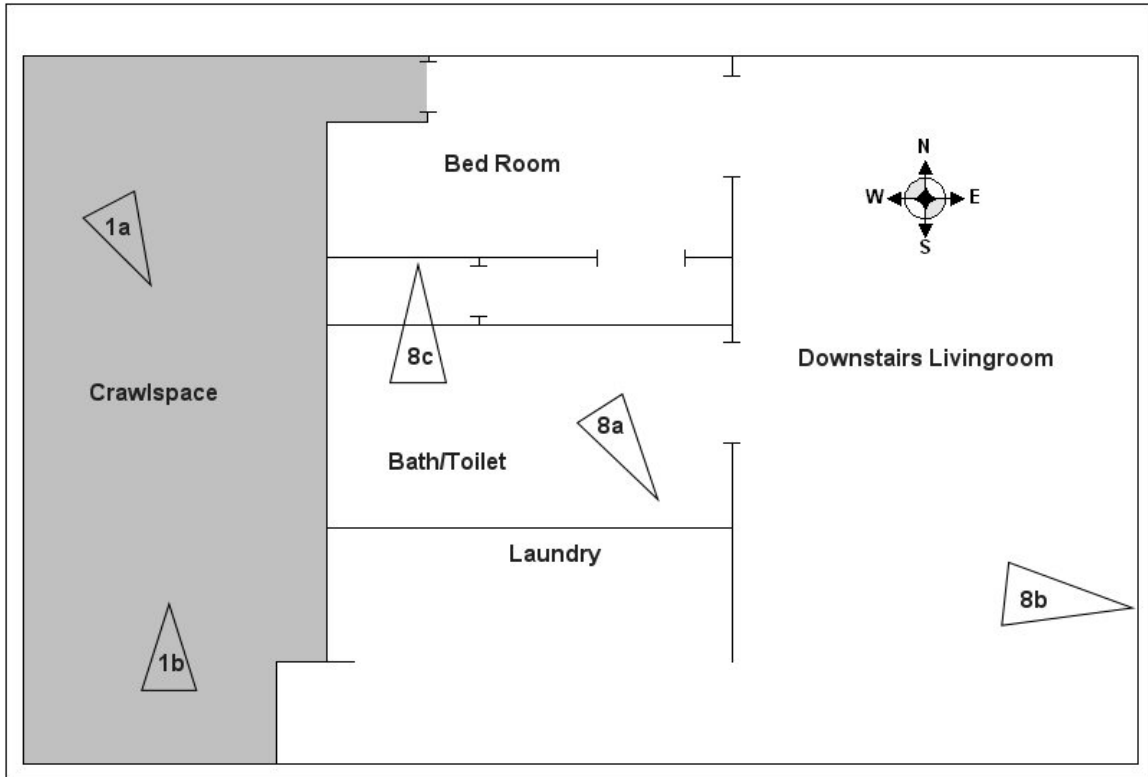


Figure 2
Basement – Not to scale

To protect against the introduction of contaminants into the subject property, the Industrial Hygienist donned fresh Tyvek[®] suits and booties upon entering the property. All equipment brought into the subject property was staged at or near the front door of each structure entered. The ladder used during the assessment was washed prior to introducing it into the residence.

Sample Collection

Although State regulation does not require samples to be collected during a Preliminary Assessment, given the limited amount of initial information for this project, FACTs performed the Preliminary Assessment with a Decision Statement in mind. Therefore, we collected wipe samples which were submitted for analysis to Analytical Chemistry Inc. in Tukwila, Washington. One wipe sample (the field blank, Sample Number 4) was archived pending the results of the initial suite of samples.

We collected our samples in such a manner that if remediation was not required, the sampling would constitute final verification sampling. For that reason, we have included the Decision Threshold that would have been applied if the subject property did not require remediation.



Wipe Samples

Wipe samples were collected in a manner consistent with State regulations. The wipe sample medium was individually wrapped commercially available Johnson & Johnson™ gauze pads. Each gauze material and alcohol solution 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 Safeway™ brand USP 70% isopropyl alcohol.

The sampling media were prepared in small batches in a clean environment (FACTs Corporate Offices). The sample media were inserted into individually identified disposable polyethylene centrifuge tubes with caps. For QA/QC purposes, a field blank was randomly selected from the batch, randomly inserted in the sampling sequence but was archived pending the results of the methamphetamine analysis. To ensure the integrity of the blank, FACTs personnel were unaware, until the actual time of sampling, which specific sample would be selected as a blank.

The history of the FACTs field blank media has demonstrated a media and solvent contamination level below the analytical detection limit for the method. For the purposes of the data quality objectives associated with this Preliminary Assessment, no duplicates were required, and none were collected.

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

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.

Collection Rationale

The samples that were collected throughout the subject property comprised of “discreet” and “composite” samples. Discreet samples are collected at single isolated locations; composite samples have been collected from more than one area, and then combined for a single analysis. The advantage to composite samples is that sampling error is reduced (more areas are sampled), and the cost for additional samples is not increased.

In the following table, the Decision Threshold is that value below which the sample result would need to be if the samples were final verification samples.



Sample Results

Sample ID	Location and Area	Result µg/100cm ²	Decision Threshold µg/100cm ²	Status
MWM013007-01a	Crawlspace ventilation duct	8.41	0.25	FAIL
MWM013007-01b	Crawlspace ventilation duct			
MWM013007-01	Crawlspace composite			
MWM013007-02a	Living room duct interior	43.79	0.25	FAIL
MWM013007-02b	Master bedroom duct interior			
MWM013007-02	Ventilation Composite			
MWM013007-03	Kitchen top of door frame	8.78	0.50	FAIL
MWM013007-04	BX Not Submitted	NA	NA	NA
MWM013007-05	Center Bedroom Top of door frames	3.70	0.50	FAIL
MWM013007-06	Master bed room top of closet shelf	0.18	0.50	PASS
MWM041307-01	Attic	0.64	0.5	FAIL
MWM013007-07	Living room, N wall	0.84	0.50	FAIL
MWM013007-08a	Downstairs bath, top of medicine chest	0.21	0.17	FAIL
MWM013007-08b	Downstairs Living room, E wall			
MWM013007-08c	Downstairs BR, Cubby hole			
MWM013007-08	Downstairs composite			

Table 2
Summary of Preliminary Sampling

Overall, the samples indicate widespread contamination throughout the entire residential structure.

The totality of evidence, including the sample results for this case, wherein every sample collected from the residence contained methamphetamine, and other indicators conclusively demonstrated the *presence* of methamphetamine in the residence and therefore the need for decontamination.

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: MDL was 0.004 µg; LOQ was 0.03 µg; MBX <MDL; LCS 0.100 µg (recovery =101%); Matrix spike 0.020 µg (recovery 0.019 µg, 95%); Matrix spike Dup 0.020 µg; (recovery 0.019 µg, 95%); Surrogate recovery (all samples): High 98% (Sample 8), Low 91% (Sample 1); FACTs reagents: IPA lot #A0701 <MDL for n=1; Gauze lot G0604 <MDL for n=2.

The QA/QC indicate the data met the data quality objectives, and the results appear to be biased low (that is, the actual contamination may be slightly higher than represented by the results).



Identification of Cook/Storage Areas

Based on information provided by Law Enforcement personnel associated with this subject property, two cook areas were identified; the kitchen and the central upstairs bedroom (from which sample Number 5 was collected). The cook and storage areas appear to have been limited to the kitchen and upstairs central bedroom. However, based on our sampling, processing and/or storage of methamphetamine may have occurred throughout the entire residence.

FUNCTIONAL SPACE SUMMARY

The following Functional Spaces have been identified and are addressed below:

Structure	Functional Space	Description of Functional Space
1	1	Main Floor Living Room
1	2	Upstairs Central Bedroom (Confirmed cook area)
1	3	Kitchen (Confirmed cook area)
1	4	Upstairs Master Bedroom
1	5	Basement Recreation Room
1	6	Upstairs Bathroom
1	7	Crawlspace
1	8	Attic
1	9	Upstairs Northeast Bedroom
1	10	Downstairs Bathroom
1	11	Downstairs Bedroom
1	12	Exterior Grounds

Table 3
Functional Space Summary

Functional Space 1: Living Room

Functional Space 1 was delineated by the walls of the entry living room, entrance to the kitchen, and stairs leading to the upstairs. This functional space also contains the front door which had a bullet hole through it. Two samples were collected from this space, a wipe composite sample from the ventilation system and a discreet sample from the north wall. Each sample conclusively demonstrated the *presence* of methamphetamine.

Functional Space 2: Upstairs Central Bedroom

This functional space was positively identified by law enforcement personnel as containing an active meth lab. The room is delineated by the walls of the room and includes the cubby hole and the closet. A wipe sample collected from this functional space confirmed the *presence* of methamphetamine.

Functional Space 3: Kitchen

This functional space was positively identified by law enforcement personnel as containing an active meth lab. The room is delineated by the walls of the room as commonly understood. A wipe sample collected from this functional space confirmed the *presence* of methamphetamine.



Functional Space 4: Master Bedroom

This functional space is delineated by the walls of the room and include the closet. Two samples were collected from this space, a wipe composite sample from the ventilation system and a discreet sample from the interior of the closet. Each sample conclusively demonstrated the *presence* of methamphetamine.

Functional Space 5: Basement Recreation Room

This is the large room that comprises the majority of the occupiable space of the basement and includes the laundry area. We collected a composite sample from this area which conclusively confirmed the presence of methamphetamine.

Functional Space 6: Upstairs Bathroom

This room is delineated by the walls and is construed to mean the term bathroom as commonly understood. No sample was collected from this functional space.

Functional Space 7: Crawlspace

The crawlspace is defined as that term is commonly known. Visual assessment indicated that storage and/or other crawlspace use is common and to be expected in this property. Therefore, this functional space is considered to be an occupiable space and is included in the scope of the remediation process. Furthermore, the furnace is located in the crawlspace and additional entry is expected for servicing.

We collected a two-part composite sample from this area, from two different locations of the ventilation system. The sample confirmed the presence of methamphetamine in the crawlspace.

Functional Space 8: Attic

The attic is defined as that term is commonly known. Visual assessment indicated that although the attic was disturbed, there was no indication of storage or use, vis-à-vis methamphetamine activity. At the request of the property owner's agent, on April 13, 2007, FACTs revisited the attic, and collected a wipe sample from an electrical junction box located on the east wall just inside the attic access. Although we do not believe that the methamphetamine present in the attic raises to the standard of "contaminant" as defined by State regulation; EPCHD addresses attics differently than other counties, and therefore, we have included Functional Space 8, the attic, in the decontamination process.

Functional Space 9: Upstairs Northeast Bedroom

This functional space is adjacent to the confirmed cook area. No sample was collected from this room.

Functional Space 10: Downstairs Bathroom

This room is defined as the term is commonly used. A sample collected from this room comprised a composite sample, and confirmed the presence of methamphetamine in the composite area.



Functional Space 11: Downstairs Bedroom

This functional space is delineated by the walls and closet of the room. This room contains a small cubbyhole which is accessed via the closet. The cubbyhole is included in the definition of this functional space.

This room also contains the access panel to the crawlspace. The crawlspace is a functional space, *per se*, and is not included as part of this functional space.

A sample collected from this room comprised a composite sample, and confirmed the presence of methamphetamine in the composite area.

Functional Space 12: Exterior Grounds

We did not observe any indication that would suggest that the exterior grounds were in anyway contaminated. Therefore, we have excluded this functional space from the remediation process.

Furnace System

Although not a functional space *per se*, the samples collected from the ventilation system, indicated that contamination in that system is particularly elevated. 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%¹⁰ and half¹¹ of the substance is released from the user's pipe. Of that material which is inhaled, between 33%¹² and 10%¹³ of the nominal dose is not absorbed into the body (leaving the remainder airborne). Recent work conducted by Industrial Hygienists at the National Jewish Hospital¹⁴ in Denver, Colorado, indicate that a single use of methamphetamine, by smoking, would result in an

¹⁰ 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

¹¹ Cook CE, Jeffcoat AR, Hill JM, et al. Pharmacokinetics of Methamphetamine Self-Administered to Human Subjects by Smoking S-(+)-Methamphetamine Hydrochloride. Drug Metabolism and Disposition 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.)

¹² 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.)

¹³ 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

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



average residential area ambient airborne concentration of methamphetamine ranging from 35 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) to over 130 $\mu\text{g}/\text{m}^3$. 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.'¹⁵

Since it is the purpose of the ventilation system to move air throughout the structure, and the furnace (including ductwork) is conclusively contaminated, we conclude the furnace may be a source of continued contamination until 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 methamphetamine contamination throughout the entire occupied space, all other sample results notwithstanding.

Therefore, we conclude that based on this sample, an high probability of contamination even in areas that have not been confirmed as contaminated by sampling.

CONCLUSION

Based on the totality of the circumstances, including law enforcement documents, 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 and significant methamphetamine presence exists throughout the subject property including the crawlspace and the furnace system.

RECOMMENDATIONS – Scope of Remediation

Based on our observations, laboratory results, and Law Enforcement information, we submit the following recommendations:

- 1) All indoor surfaces in the main structure including the closets, ceilings, floors and walls of all rooms of the residence, cubby holes (two), and all surfaces in the crawlspace, and attic should be decontaminated by a licensed contractor, trained and experienced in such decontaminations as required by State regulations.
- 2) The furnace system should be either decontaminated or removed and discarded. Based on our experience, it may be more economically feasible to entirely remove and replace the furnace and all associated duct work. Section 5.5 of the regulations state:

¹⁵ 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.)



§5.5. Decontamination of ventilation systems by a contractor that is trained and equipped to comply with the protocol for ventilation system decontamination presented in Appendix C of these regulations

- 3) The crawlspace should be decontaminated by inducing isolated negative pressure in the crawlspace and removing, by vacuum, the top half inch of dirt from the crawlspace. After the dirt removal, all surfaces in the crawlspace should be thoroughly wiped down.
- 4) The attic should be decontaminated by inducing isolated negative pressure in the attic, and removing, by vacuum or other suitable means, all of the insulation from the attic. After the insulation removal, all surfaces in the crawlspace should be thoroughly wiped down. The contractor may find the remediation of the attic more economically feasible by simply removing the ceiling and remediating the attic from the occupiable space.
- 5) The decontamination of the crawlspace and the attic should be conducted in a minimum of Level C PPE ensembles with full-face APRs or full-face PAPRs. We recommend the decontamination of the remaining areas be conducted in a minimum of Level C PPE ensembles with half-face APRs or half-face PAPRs. We recommend that a full decontamination corridor with showers be established in the back yard of the property for access into the primary residence through the exterior kitchen 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) The contractor should be held contractually liable for attaining all necessary permits for remediation.
- 8) All work performed at the residence should be conducted by an experienced contractor whose employees are properly trained in accordance with 29 CFR §1910.120 and Colorado Revised Statute §25-18.5-104; *Entry into illegal drug laboratories*.
- 9) All work performed at the residence should be conducted in accordance with all other State and County regulations, in particular Attachment “A” to Regulations Of The El Paso County Board Of Health, Chapter 4, *Methamphetamine Laboratory Cleanup Regulations*.
- 10) All remediation work should be performed pursuant to 29 CFR §1910.120.
- 11) The contractor *should* be contractually obligated to perform personnel air monitoring for methamphetamine for at least one full shift employee per day to allow for support of proper PPE selection.



- 12) The contractor *should* be contractually obligated to include the personnel air monitoring data in their final documentation.
- 13) Any contractors (and their subcontractors) should be contractually obligated to decontaminate the property to below the statutory limits (the minimum statutory limit in Colorado is 0.1 µg/100 cm² and the maximum permitted statutory limit in Colorado is 0.5 µg/100 cm²). Therefore, the contractor should be prepared to ensure that the property is decontaminated to the lowest possible statutory limit of 0.1 µg/100 cm².
- 14) 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.
- 15) Contractors should be contractually obligated to cover industrial hygiene costs of return visits and sample expenses as a result of failed final clearance(s).
- 16) State regulation prohibits painting or otherwise encapsulating surfaces prior to final clearance sampling.
- 17) Following the decontamination process, prior to the final clearance sampling by the Industrial Hygienist, the remediation contractor/subcontractor *should* be contractually obligated to collect a minimum of three QA/QC wipe samples from the property, as part of their own QA program, and submit those samples for methamphetamine analysis. The contractor should be contractually obligated to provide their wipe sampling data (including location of sample, area of sample, and analysis results), to the consulting Industrial Hygienist for review prior to final clearance sampling. Those data should confirm the level of contamination is less than the lowest statutory limit for the State of Colorado (0.1 µg/100 cm²).
- 18) If the three contractor QA/QC samples suggest that contamination in the property has been sufficiently reduced, the Industrial Hygienist should perform final clearance sampling according to 6-CCR 1014-3.
- 19) Until decontamination has been properly effected pursuant to 6-CCR 1014-3, no unauthorized personnel should be permitted entry into the property until it has been tested pursuant to State regulations.
- 20) We recommend that this preliminary assessment be submitted without delay to the El Paso County Health Department, as required by binding resolution.

Enclosures: One CD; _____ Page data package, and Appendices





APPENDIX A:

SUPPORTING DOCUMENTS

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
ML7	FACTs ISDS 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
ML17	FACTs Field Data Sheets



**FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.
CLANDESTINE METHAMPHETAMINE LABORATORY
ASSESSMENT FIELD FORMS[©]**

FACTs project name:	Mount Werner	Form # ML1
Date: Jan 30, 2007		
Reporting IH:	Caoimhin P. Connell, Forensic IH	

PROPERTY DESCRIPTION:

Physical address	1059 Mount Werner Cir Colorado Springs CO 80906-2765		
Legal description or VIN	Schedule: 6429309019 LOT 11 BLK 3 PARK-MEADOWS 2		
Registered Property Owner	Secretary Of Housing & Urban Development 1670 BROADWAY FL 23 (Presumably, Denver, CO)		
Number of structures	One		
Type of Structures (Each affected structure will need a "Functional Space" inventory)	1: Main residence	1,053	Square feet
	2:		Square feet
	3:		Square feet
	4:		Square feet
	5:		Square feet
	6:		Square feet
Adjacent and/ or surrounding properties	1: North: Public Park		
	2: South: Single Dwelling Residence		
	3: East: Public Street		
	4: West: Single Dwelling Residence		
	5:		
	6:		
General Property Observations	The property was unoccupied and in various states of renovation. Carpeting had been removed, and ceiling tiles in the basement had also been removed. Overall state of the property was poor on the day of our visit. All windows and doors were boarded over.		
Presumed Production Method	Red phosphorous production		



FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

PLUMBING INSPECTION AND INVENTORY

FACTs project name: Mount Werner	Form # ML2
Date: Jan 30, 2007	
Reporting IH:	Caoimhin P. Connell, Forensic IH

Functional Space	Room	Fixture	Indicia?	Comments
6	Bathroom #1	Bath	N	
6	Bathroom #1	Shower	N	
6	Bathroom #1	Sink	N	
6	Bathroom #1	Toilet	N	
10	Bathroom #2	Bath	NA	
10	Bathroom #2	Shower	N	
10	Bathroom #2	Sink	N	
10	Bathroom #2	Toilet	N	
3	Kitchen	Sink	N	
NA	Slop sink		NA	NA
5	Washing machine		NA	NA
3	Dishwasher		NA	NA

VENTILATION INSPECTION AND INVENTORY

Item	Y/N	Indicia ?	Sampled ?	Comments
Isolated AHU?	Y	Y	Y	
Common air intake?	N			
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			
Pressurized structure?	N			

LAW ENFORCEMENT DOCUMENTATION

FACTs project name:	Mount Werner	Form # ML4
Date: Jan 30, 2007		
Reporting IH:	Caoimhin P. Connell, Forensic IH	

Inventory of Reviewed Documents	1: Telephone interview of LEO regarding case Number 0302982 <hr/> 2: Narrative <hr/> 3: Chemical inventory <hr/> 4: <hr/> 5: <hr/>
Described method(s) of production	Red phosphorous
Chemicals identified by the LEA as being present	Iodine <hr/> Solvents <hr/> Methamphetamine <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
Cooking areas identified	1: Kitchen 2: Upstairs central bedroom
Chemical storage areas identified	1: Kitchen 2: Upstairs central bedroom
LE Observation on areas of contamination or waste disposal	1: Kitchen 2: Upstairs central bedroom





FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

FIELD OBSERVATIONS

FACTs project name:	Mount Werner	Form # ML5
Date: Jan 30, 2007		
Reporting IH:	Caoimhin P. Connell, Forensic IH	

Structure: 1

Functional Space: 1

Item	Yes or Number	No	Item	Yes or Number	No
Acids		X	Hydrogen peroxide		X
Aerosol cans		X	Iodine		X
Alcohols (MeOH, EtOH)		X	Kitty litter		X
Ammonia		X	Lead		X
Ammunition		X	Lithium		X
Bags of salt		X	Match components		X
Bases		X	Mercury		X
Basters/Pipettes		X	Methamphetamine	Y	
Batteries		X	Modified coolers		X
Bi-phasic wastes		X	Needles/Syringes		X
Chemical storage		X	Other OTC		X
Colored wastes		X	Phenyl-2-propanone		X
Drug paraphernalia		X	Presence of cats		X
Empty OTC Bottles		X	Pseudoephedrine		X
Ephedrine		X	Red P		X
Filters		X	Solvents - ketones, etc		X
Gas cylinders		X	Urine containers		X
Gerry cans		X	Weapons		X
Glassware		X	Yellow staining	Y	
Heet or similar (MeOH)		X			
Bullet hole(s)	Y				

Notes

- ① Present but not as indicia
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- ③ Present in normal household expectations
- ④ Modified in manner consistent with clanlab use



FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

FIELD OBSERVATIONS

FACTs project name:	Mount Werner	Form # ML5
Date: Jan 30, 2007		
Reporting IH:	Caoimhin P. Connell, Forensic IH	

Structure: 1

Functional Space: 2

Item	Yes or Number	No	Item	Yes or Number	No
Acids		X	Hydrogen peroxide		X
Aerosol cans		X	Iodine		X
Alcohols (MeOH, EtOH)		X	Kitty litter		X
Ammonia		X	Lead		X
Ammunition		X	Lithium		X
Bags of salt		X	Match components		X
Bases		X	Mercury		X
Basters/Pipettes		X	Methamphetamine	Y	
Batteries		X	Modified coolers		X
Bi-phasic wastes		X	Needles/Syringes		X
Chemical storage		X	Other OTC		X
Colored wastes		X	Phenyl-2-propanone		X
Drug paraphernalia		X	Presence of cats		X
Empty OTC Bottles		X	Pseudoephedrine		X
Ephedrine		X	Red P		X
Filters		X	Solvents - ketones, etc		X
Gas cylinders		X	Urine containers		X
Gerry cans		X	Weapons		X
Glassware		X	Yellow staining	Y	
Heet or similar (MeOH)		X			

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FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

FIELD OBSERVATIONS

FACTs project name:	Mount Werner	Form # ML5
Date: Jan 30, 2007		
Reporting IH:	Caoimhin P. Connell, Forensic IH	

Structure: 1

Functional Space: 3

Item	Yes or Number	No	Item	Yes or Number	No
Acids		X	Hydrogen peroxide		X
Aerosol cans		X	Iodine		X
Alcohols (MeOH, EtOH)		X	Kitty litter		X
Ammonia		X	Lead		X
Ammunition		X	Lithium		X
Bags of salt		X	Match components		X
Bases		X	Mercury		X
Basters/Pipettes		X	Methamphetamine	Y	
Batteries		X	Modified coolers		X
Bi-phasic wastes		X	Needles/Syringes		X
Chemical storage		X	Other OTC		X
Colored wastes		X	Phenyl-2-propanone		X
Drug paraphernalia		X	Presence of cats		X
Empty OTC Bottles		X	Pseudoephedrine		X
Ephedrine		X	Red P		X
Filters		X	Solvents - ketones, etc		X
Gas cylinders		X	Urine containers		X
Gerry cans		X	Weapons		X
Glassware		X	Yellow staining		X
Heet or similar (MeOH)		X			

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FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

FIELD OBSERVATIONS

FACTs project name:	Mount Werner	Form # ML5
Date: Jan 30, 2007		
Reporting IH:	Caoimhin P. Connell, Forensic IH	

Structure: 1

Functional Space: 4

Item	Yes or Number	No	Item	Yes or Number	No
Acids		X	Hydrogen peroxide		X
Aerosol cans		X	Iodine		X
Alcohols (MeOH, EtOH)		X	Kitty litter		X
Ammonia		X	Lead		X
Ammunition		X	Lithium		X
Bags of salt		X	Match components		X
Bases		X	Mercury		X
Basters/Pipettes		X	Methamphetamine	Y	
Batteries		X	Modified coolers		X
Bi-phasic wastes		X	Needles/Syringes		X
Chemical storage		X	Other OTC		X
Colored wastes		X	Phenyl-2-propanone		X
Drug paraphernalia		X	Presence of cats		X
Empty OTC Bottles		X	Pseudoephedrine		X
Ephedrine		X	Red P		X
Filters		X	Solvents - ketones, etc		X
Gas cylinders		X	Urine containers		X
Gerry cans		X	Weapons		X
Glassware		X	Yellow staining		X
Heet or similar (MeOH)		X			

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FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

FIELD OBSERVATIONS

FACTs project name:	Mount Werner	Form # ML5
Date: Jan 30, 2007		
Reporting IH:	Caoimhin P. Connell, Forensic IH	

Structure: 1

Functional Space: 5

Item	Yes or Number	No	Item	Yes or Number	No
Acids		X	Hydrogen peroxide		X
Aerosol cans		X	Iodine		X
Alcohols (MeOH, EtOH)		X	Kitty litter		X
Ammonia		X	Lead		X
Ammunition		X	Lithium		X
Bags of salt		X	Match components		X
Bases		X	Mercury		X
Basters/Pipettes		X	Methamphetamine	Y	
Batteries		X	Modified coolers		X
Bi-phasic wastes		X	Needles/Syringes		X
Chemical storage		X	Other OTC		X
Colored wastes		X	Phenyl-2-propanone		X
Drug paraphernalia		X	Presence of cats		X
Empty OTC Bottles		X	Pseudoephedrine		X
Ephedrine		X	Red P		X
Filters		X	Solvents - ketones, etc		X
Gas cylinders		X	Urine containers		X
Gerry cans		X	Weapons		X
Glassware		X	Yellow staining		X
Heet or similar (MeOH)		X			

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FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

FIELD OBSERVATIONS

FACTs project name:	Mount Werner	Form # ML5
Date: Jan 30, 2007		
Reporting IH:	Caoimhin P. Connell, Forensic IH	

Structure: 1

Functional Space: 6

Item	Yes or Number	No	Item	Yes or Number	No
Acids		X	Hydrogen peroxide		X
Aerosol cans		X	Iodine		X
Alcohols (MeOH, EtOH)		X	Kitty litter		X
Ammonia		X	Lead		X
Ammunition		X	Lithium		X
Bags of salt		X	Match components		X
Bases		X	Mercury		X
Basters/Pipettes		X	Methamphetamine	Y	
Batteries		X	Modified coolers		X
Bi-phasic wastes		X	Needles/Syringes		X
Chemical storage		X	Other OTC		X
Colored wastes		X	Phenyl-2-propanone		X
Drug paraphernalia		X	Presence of cats		X
Empty OTC Bottles		X	Pseudoephedrine		X
Ephedrine		X	Red P		X
Filters		X	Solvents - ketones, etc		X
Gas cylinders		X	Urine containers		X
Gerry cans		X	Weapons		X
Glassware		X	Yellow staining		X
Heet or similar (MeOH)		X			

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FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

FIELD OBSERVATIONS

FACTs project name:	Mount Werner	Form # ML5
Date: Jan 30, 2007		
Reporting IH:	Caoimhin P. Connell, Forensic IH	

Structure: 1

Functional Space: 7

Item	Yes or Number	No	Item	Yes or Number	No
Acids		X	Hydrogen peroxide		X
Aerosol cans		X	Iodine		X
Alcohols (MeOH, EtOH)		X	Kitty litter		X
Ammonia		X	Lead		X
Ammunition		X	Lithium		X
Bags of salt		X	Match components		X
Bases		X	Mercury		X
Basters/Pipettes		X	Methamphetamine	Y	
Batteries		X	Modified coolers		X
Bi-phasic wastes		X	Needles/Syringes		X
Chemical storage		X	Other OTC		X
Colored wastes		X	Phenyl-2-propanone		X
Drug paraphernalia		X	Presence of cats		X
Empty OTC Bottles		X	Pseudoephedrine		X
Ephedrine		X	Red P		X
Filters		X	Solvents - ketones, etc		X
Gas cylinders		X	Urine containers		X
Gerry cans		X	Weapons		X
Glassware		X	Yellow staining		X
Heet or similar (MeOH)		X			

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FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

FIELD OBSERVATIONS

FACTs project name:	Mount Werner	Form # ML5
Date: Jan 30, 2007		
Reporting IH:	Caoimhin P. Connell, Forensic IH	

Structure: 1

Functional Space: 8

Item	Yes or Number	No	Item	Yes or Number	No
Acids		X	Hydrogen peroxide		X
Aerosol cans		X	Iodine		X
Alcohols (MeOH, EtOH)		X	Kitty litter		X
Ammonia		X	Lead		X
Ammunition		X	Lithium		X
Bags of salt		X	Match components		X
Bases		X	Mercury		X
Basters/Pipettes		X	Methamphetamine		X
Batteries		X	Modified coolers		X
Bi-phasic wastes		X	Needles/Syringes		X
Chemical storage		X	Other OTC		X
Colored wastes		X	Phenyl-2-propanone		X
Drug paraphernalia		X	Presence of cats		X
Empty OTC Bottles		X	Pseudoephedrine		X
Ephedrine		X	Red P		X
Filters		X	Solvents - ketones, etc		X
Gas cylinders		X	Urine containers		X
Gerry cans		X	Weapons		X
Glassware		X	Yellow staining		X
Heet or similar (MeOH)		X			

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FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

FIELD OBSERVATIONS

FACTs project name:	Mount Werner	Form # ML5
Date: Jan 30, 2007		
Reporting IH:	Caoimhin P. Connell, Forensic IH	

Structure: 1

Functional Space: 9

Item	Yes or Number	No	Item	Yes or Number	No
Acids		X	Hydrogen peroxide		X
Aerosol cans		X	Iodine		X
Alcohols (MeOH, EtOH)		X	Kitty litter		X
Ammonia		X	Lead		X
Ammunition		X	Lithium		X
Bags of salt		X	Match components		X
Bases		X	Mercury		X
Basters/Pipettes		X	Methamphetamine		X
Batteries		X	Modified coolers		X
Bi-phasic wastes		X	Needles/Syringes		X
Chemical storage		X	Other OTC		X
Colored wastes		X	Phenyl-2-propanone		X
Drug paraphernalia		X	Presence of cats		X
Empty OTC Bottles		X	Pseudoephedrine		X
Ephedrine		X	Red P		X
Filters		X	Solvents - ketones, etc		X
Gas cylinders		X	Urine containers		X
Gerry cans		X	Weapons		X
Glassware		X	Yellow staining		X
Heet or similar (MeOH)		X			

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FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

FIELD OBSERVATIONS

FACTs project name:	Mount Werner	Form # ML5
Date: Jan 30, 2007		
Reporting IH:	Caoimhin P. Connell, Forensic IH	

Structure: 1

Functional Space: 10

Item	Yes or Number	No	Item	Yes or Number	No
Acids		X	Hydrogen peroxide		X
Aerosol cans		X	Iodine		X
Alcohols (MeOH, EtOH)		X	Kitty litter		X
Ammonia		X	Lead		X
Ammunition		X	Lithium		X
Bags of salt		X	Match components		X
Bases		X	Mercury		X
Basters/Pipettes		X	Methamphetamine	Y	
Batteries		X	Modified coolers		X
Bi-phasic wastes		X	Needles/Syringes		X
Chemical storage		X	Other OTC		X
Colored wastes		X	Phenyl-2-propanone		X
Drug paraphernalia		X	Presence of cats		X
Empty OTC Bottles		X	Pseudoephedrine		X
Ephedrine		X	Red P		X
Filters		X	Solvents - ketones, etc		X
Gas cylinders		X	Urine containers		X
Gerry cans		X	Weapons		X
Glassware		X	Yellow staining		X
Heet or similar (MeOH)		X			

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FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

FIELD OBSERVATIONS

FACTs project name:	Mount Werner	Form # ML5
Date: Jan 30, 2007		
Reporting IH:	Caoimhin P. Connell, Forensic IH	

Structure: 1

Functional Space: 11

Item	Yes or Number	No	Item	Yes or Number	No
Acids		X	Hydrogen peroxide		X
Aerosol cans		X	Iodine		X
Alcohols (MeOH, EtOH)		X	Kitty litter		X
Ammonia		X	Lead		X
Ammunition		X	Lithium		X
Bags of salt		X	Match components		X
Bases		X	Mercury		X
Basters/Pipettes		X	Methamphetamine		X
Batteries		X	Modified coolers		X
Bi-phasic wastes		X	Needles/Syringes		X
Chemical storage		X	Other OTC		X
Colored wastes		X	Phenyl-2-propanone		X
Drug paraphernalia		X	Presence of cats		X
Empty OTC Bottles		X	Pseudoephedrine		X
Ephedrine		X	Red P		X
Filters		X	Solvents - ketones, etc		X
Gas cylinders		X	Urine containers		X
Gerry cans		X	Weapons		X
Glassware		X	Yellow staining		X
Heet or similar (MeOH)		X			

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FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

FIELD OBSERVATIONS

FACTs project name:	Mount Werner	Form # ML5
Date: Jan 30, 2007		
Reporting IH:	Caoimhin P. Connell, Forensic IH	

Structure: 1

Functional Space: 12

Item	Yes or Number	No	Item	Yes or Number	No
Acids		X	Hydrogen peroxide		X
Aerosol cans		X	Iodine		X
Alcohols (MeOH, EtOH)		X	Kitty litter		X
Ammonia		X	Lead		X
Ammunition		X	Lithium		X
Bags of salt		X	Match components		X
Bases		X	Mercury		X
Basters/Pipettes		X	Methamphetamine		X
Batteries		X	Modified coolers		X
Bi-phasic wastes		X	Needles/Syringes		X
Chemical storage		X	Other OTC		X
Colored wastes		X	Phenyl-2-propanone		X
Drug paraphernalia		X	Presence of cats		X
Empty OTC Bottles		X	Pseudoephedrine		X
Ephedrine		X	Red P		X
Filters		X	Solvents - ketones, etc		X
Gas cylinders		X	Urine containers		X
Gerry cans		X	Weapons		X
Glassware		X	Yellow staining		X
Heet or similar (MeOH)		X			

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PRE-REMEDIATION PHOTOGRAPH LOG SHEET

FACTs project name:	Mount Werner	Form # ML8
Date: Jan 30, 2007		
Reporting IH:	Caoimhin P. Connell, Forensic IH	

Name ^	Date Modified	Date Picture Taken	Name ^	Date Modified	Date Picture Taken
Exterior 1	1/30/2007 14:39	1/30/2007 14:39	Attic access	1/30/2007 14:44	1/30/2007 14:44
Front door 1	1/30/2007 14:39	1/30/2007 14:39	Kitchen 1	1/30/2007 14:44	1/30/2007 14:44
Exterior 2	1/30/2007 14:40	1/30/2007 14:40	Kitchen 3	1/30/2007 14:44	1/30/2007 14:44
Front door 2	1/30/2007 14:40	1/30/2007 14:40	Kitchen 4	1/30/2007 14:45	1/30/2007 14:45
Front door 3	1/30/2007 14:40	1/30/2007 14:40	Laundry 1	1/30/2007 14:45	1/30/2007 14:45
Front door 4	1/30/2007 14:40	1/30/2007 14:40	Laundry2	1/30/2007 14:45	1/30/2007 14:45
Front door 5	1/30/2007 14:40	1/30/2007 14:40	Laundry3	1/30/2007 14:45	1/30/2007 14:45
Livingroom 1	1/30/2007 14:40	1/30/2007 14:40	Rec Rm 1	1/30/2007 14:45	1/30/2007 14:45
Livingroom 2	1/30/2007 14:41	1/30/2007 14:41	Rec Rm 2	1/30/2007 14:54	1/30/2007 14:54
Livingroom 3	1/30/2007 14:41	1/30/2007 14:41	Rec Rm 3	1/30/2007 14:54	1/30/2007 14:54
Livingroom 4	1/30/2007 14:41	1/30/2007 14:41	Rec Rm 4	1/30/2007 14:54	1/30/2007 14:54
Livingroom 5	1/30/2007 14:41	1/30/2007 14:41	Rec Rm 5	1/30/2007 14:54	1/30/2007 14:54
Livingroom 6	1/30/2007 14:41	1/30/2007 14:41	Downstairs Bath 1	1/30/2007 14:54	1/30/2007 14:54
Master bath 1	1/30/2007 14:42	1/30/2007 14:42	Downstairs Bath 2	1/30/2007 14:55	1/30/2007 14:55
Master bath 2	1/30/2007 14:42	1/30/2007 14:42	Crawlspace access	1/30/2007 14:55	1/30/2007 14:55
Master bed 1	1/30/2007 14:42	1/30/2007 14:42	Downstairs Bed 1	1/30/2007 14:55	1/30/2007 14:55
Master bed 2	1/30/2007 14:42	1/30/2007 14:42	Downstairs Bed 2	1/30/2007 14:55	1/30/2007 14:55
Master bath 4	1/30/2007 14:42	1/30/2007 14:42	Downstairs Bed 3	1/30/2007 14:55	1/30/2007 14:55
NE Bed 1	1/30/2007 14:42	1/30/2007 14:42	Downstairs Bed 4	1/30/2007 14:55	1/30/2007 14:55
Central Bed 1	1/30/2007 14:43	1/30/2007 14:43	Crawlspace 1	1/30/2007 14:55	1/30/2007 14:55
Central Bed 2	1/30/2007 14:43	1/30/2007 14:43	Crawlspace 2	1/30/2007 14:55	1/30/2007 14:55
Central Bed 3	1/30/2007 14:43	1/30/2007 14:43	Crawlspace 3	1/30/2007 14:56	1/30/2007 14:56
Central Bed 4	1/30/2007 14:43	1/30/2007 14:43	Crawlspace 4	1/30/2007 14:56	1/30/2007 14:56
Central Bed 5	1/30/2007 14:43	1/30/2007 14:43	Crawlspace 5	1/30/2007 14:56	1/30/2007 14:56
Central Bed 6	1/30/2007 14:43	1/30/2007 14:43	Crawlspace 6	1/30/2007 14:56	1/30/2007 14:56
Central Bed 7	1/30/2007 14:43	1/30/2007 14:43	Master bath 3	1/30/2007 14:42	1/30/2007 14:42
Central Bed 8	1/30/2007 14:44	1/30/2007 14:44	Master bed 3	1/30/2007 14:42	1/30/2007 14:42
Central Bed 9	1/30/2007 14:44	1/30/2007 14:44	Kitchen 2	1/30/2007 14:44	1/30/2007 14:44





FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

CERTIFICATION, VARIATIONS AND SIGNATURE SHEET

FACTs project name:	Mount Werner	Form # ML14
Date: April 25, 2007		
Reporting IH:	Caoimhin 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.	XXXXXXXXXXXXXXXXXX
I do hereby certify that I conducted post decontamination clearance sampling in accordance with 6 CCR 1014-3, § 6.	XXXXXXXXXXXXXXXXXX
I do hereby certify that the cleanup standards established by 6 CCR 1014-3, § 7 have been met as evidenced by testing I conducted.	XXXXXXXXXXXXXXXXXX
I do hereby certify that the analytical results reported here are faithfully reproduced.	

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

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, and that I conducted post decontamination clearance sampling in accordance with 6 CCR 1014-3, § 6. I further certify that the property has been decontaminated in accordance with the procedures set forth in 6 CCR 1014-3, § 5, and that the cleanup standards established by 6 CCR 1014-3, § 7 have been met as evidenced by testing I conducted.~~

Signature _____ Date: Jan 30, 2007 _____

OR

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: April 25, 2007 _____

FINAL DOCUMENTATION CHECKLIST

FACTs project name:	Mount Werner	Form # ML16
Date: Jan 30, 2007		
Reporting IH:	Caoimhin P. Connell, Forensic IH	

DOCUMENT	Included
FACT Property description field form	<i>CF</i>
FACTs Functional space inventory field form	<i>CF</i>
FACTs Law Enforcement documentation field form	<i>CF</i>
FACTs Field Observations field form	<i>CF</i>
FACTs Contamination migration field form (None identified)	<i>CF</i>
FACTs ISDS field form	NA
FACTs Pre-remediation photographs	<i>CF</i>
FACTs Post-remediation photographs	NA
FACTs Pre-remediation photograph log sheet field form	<i>CF</i>
FACTs Post-remediation photograph log sheet field form	NA
FACTs Drawing of Cook area(s)	<i>CF</i>
FACTs Drawing of Storage area(s)	<i>CF</i>
FACTs Drawing of Waste area(s)	<i>CF</i>
FACTs Drawing General site	<i>CF</i>
FACTs description sampling procedures, handling, and QA/QC	<i>CF</i>
FACTs drawing of sample locations?	<i>CF</i>
FACTs health and safety procedures used in accordance with OSHA	<i>CF</i>
FACTs post-decontamination samples locations	NA
FACTs Analytical Laboratory Documentation Form	<i>CF</i>
FACTs SOQs	<i>CF</i>
FACTs Certification of procedures, results, and variations from standard practices.	<i>CF</i>
Analytical Laboratory Reports	<i>CF</i>
Available Law Enforcement documents	NA
Plumbing inspection field form (plumbing system integrity and identification of sewage disposal mechanism)	<i>CF</i>
Contractor's description of the decontamination procedures used and a description of each area that was decontaminated	NA
Identification of common ventilation systems with adjacent units or common areas.	<i>CF</i>
A description of the analytical methods used and laboratory QA/QC requirements.	<i>CF</i>
Contractor's description of the removal procedures used and a description of areas where removal was conducted, and the materials removed.	NA
Contractor's description of the encapsulation procedures used and a description of the areas and/or materials where encapsulation was performed.	NA
Contractor's description of the waste management procedures used, including handling and final disposition of wastes.	NA



SAMPLING FIELD FORM

FACTs project name: Mt. Werner	Form # ML17
Date: Jan 30, 2007	Alcohol Lot#: A0701 Gauze Lot#: G0604
Reporting IH: Caoimhín P. Connell, Forensic IH	Preliminary X Intermediate ___ Final ___

Sample ID MWM013007	Type	Area/ Volume /Weight	Location	Func. Space	Dimensions	Substrate	Result
1A	W		Crawlspace on top of ventilation duct	7	17x2	Metal	
1B	W		Crawlspace on top of ventilation duct	7	17x2	Metal	
1	W		Crawlspace composite	7		Metal	
2A	W		Living room vent duct interior	1	2X2	Metal	
2B	W		Master bedroom vent duct interior	4	1X4	Metal	
2	W		Ventilation duct interior composite			Metal	
3	W		Kitchen top of door frame	3	72X0.5	Painted wood	
4	W		BX		BX		
5	W		Center bedroom door frame	2	72X0.5	Painted wood	
6	W		Top shelf master bedroom closet	4	9X11	Painted wood	
7	W		Living room north wall	1	9X12	Painted wall	
8A	W		Downstairs bath, top of medicine chest	10	25X4	Wood	
8B	W		Downstairs rec room east wall	5	25X4	Wood	
8C	W		Downstairs bedroom cubby hole	11	25X4	Wood	
8	W		Downstairs composite				

Sample Types: W=Wipe; V=Microvacuum; A=Air; B=Bulk; L=liquid





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:	Mt. Werner	Form # ML15
Date:	Feb 26, 2007	
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.

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, and the American Industrial Hygiene Association.

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

Mr. Connell is also a 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 condominiums. Mr. Connell has conducted over 50 assessments in illegal drug labs.

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 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, who is a committee member of the ASTM International Forensic Sciences Committee, is the sole author of the draft ASTM E50 *Standard Practice for the Assessment of Contamination at Suspected Clandestine Drug Laboratories*.



FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

APPENDIX B

ANALYTICAL REPORTS FOR FACTS SAMPLES



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:	07108-01
Date Received:	February 1, 2007
Date Completed:	February 3, 2007

February 5, 2007

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

CLIENT REF: Mount Werner

SAMPLES: wipes/7

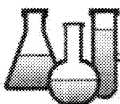
ANALYSIS: Methamphetamine by Gas Chromatography-Mass Spectrometry.

RESULTS: in total micrograms (ug)

Sample	Methamphetamine, ug	% Surrogate Recovery
MWM013007 - 01	36.9	91
MWM013007 - 02	22.6	96
MWM013007 - 03	20.4	97
MWM013007 - 05	8.60	95
MWM013007 - 06	1.14	94
MWM013007 - 07	5.86	92
MWM013007 - 08	4.11	98
QA/QC Method Blank	< 0.004	
QC 0.100 ug Standard	0.101	
QA 0.020 ug Matrix Spike	0.019	
QA 0.020 ug Matrix Spike Duplicate	0.019	
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.

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:	07125-09
Date Received:	April 18, 2007
Date Completed:	April 19, 2007

April 20, 2007

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

CLIENT REF: El Paso

SAMPLES: wipes/5

ANALYSIS: Methamphetamine by Gas Chromatography-Mass Spectrometry.

RESULTS: in total micrograms (ug)

Sample	Methamphetamine, ug	% Surrogate Recovery
E [REDACTED]	[REDACTED]	[REDACTED]
EP02 MWM041307-01	0.878	97
[REDACTED]	[REDACTED]	[REDACTED]
QA/QC Method Blank	< 0.004	
QC 0.100 ug Standard	0.101	
QA 0.020 ug Matrix Spike	0.019	
QA 0.020 ug Matrix Spike Duplicate	0.020	
Method Detection Limit (MDL)	0.004	
Practical Quantitation Limit (PQL)	0.030	

<: less than, not detected above the PQL

Robert M. Orheim
Director of Laboratories