FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

Preliminary Assessment
and
Decision Statement
of an
Identified Illegal Drug Laboratory
at
8105 W 16th Place
Lakewood, CO 80214-6052

Prepared for:

REMAX
390 Union Blvd, Lakewood, CO 80228

Prepared by:

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

March 2, 2009

Table of Contents

EXECUTIVE SUMMARY

On Thursday, January 8, 2009, Forensic Applications Consulting Technologies, Inc. (FACTs) was contracted by a prospective buyer to perform a cursory evaluation for the presence of methamphetamine at 8105 W 16th Place, Lakewood, CO 80214-6052 (the subject property).

Pursuant to the Colorado Real Estate methamphetamine disclosure and testing statute as described by CRS §38-35.7-103(2)(a), FACTs collected two standard five-part composite samples for the quantitative determination of the presence of methamphetamine from ten different locations in the subject property.

The analysis results confirmed the presence of methamphetamine at the residence, and indicated the contamination may have been marginal although possibly widespread.

Pursuant to CRS §25-18.5-101 *et seq*., on Monday February 16, 2009, FACTs performed a State mandated Preliminary Assessment as defined by Colorado State Board of Health Regulation 6 CCR 1014-3. Pursuant to those regulations, this document serves as both the Preliminary Assessment[1] and the Final Report of verification sampling resulting in a Decision Statement.[2]

In strict adherence to State statutes and State regulations, FACTs has determined the following:

- An illegal drug lab, as that term is defined in CRS §25-18.5-101, existed at the subject property at the time of our assessment.

- A Class 1 Public Nuisance, as defined in CRS §16-13-303(1) existed at the property at the time of our assessment.

- The presence of methamphetamine was confirmed to be present at the property at the time of our assessment.

- Pursuant to the state-of-knowledge toxicological risk models developed by the State of Colorado,[3] the concentrations of methamphetamine at the subject property were not sufficiently elevated to be considered a "contaminant" as that term is defined in 6 CCR 1014-3 (§3).

---

[1] The Colorado State Board Of Health Regulations Pertaining to the Cleanup of Methamphetamine Laboratories, 6-CCR 1014-3 (§4)

[2] Ibid. (§8)

[3] Hammon T, Griffin S, *Support For Selection Of A Cleanup Level For Methamphetamine At Clandestine Drug Laboratories*, Colorado Department of Public Health and Environment, February 2005

- Pursuant to 6 CCR 1014-3 (Mandatory Appendix A) FACTs hereby issues, by virtue of this document, a *Decision Statement*[4] affirming that:

    a. The initial hypothesis was rejected and the initial null hypothesis was accepted (sufficient evidence existed to confirm the presence of methamphetamine).

    b. Upon the performance of the required *Preliminary Assessment*, the second hypothesis was sequentially tested, and no support was found; the null hypothesis was accepted (the presence of trace amounts of methamphetamine notwithstanding), the property was found to be compliant.

- Pursuant to this *Decision Statement,* FACTs recommends the property be released for immediate occupancy; no harmful chemical residues were found at concentrations that may present an immediate or long-term threat to human health and/or the environment.

BACKGROUND

On January 8, 2009, FACTs visited the subject property to perform a cursory industrial hygiene evaluation for the presence of methamphetamine. The data quality objectives of the evaluation was not to determine representative concentrations, nor to characterize degree and/or extent of any extant contamination, but rather to merely provide a "Yes" or "No" answer to the question: "Is methamphetamine present at the property?"

During the January 8, 2009 evaluation, two five part composite samples were collected from various locations at the residence. The reportable limit during the evaluation was set at the lowest regulatory limit for methamphetamine in Colorado, namely 0.1 µg/100cm2. The composite samples conclusively confirmed the presence of methamphetamine at the property at concentrations greater than the reportable limit. Based on the information thus gained, the property was "discovered" and the Property Owner was given "notice" as those terms are found in CRS §25-18.5-103.

As a result of the cursory evaluation, a Preliminary Assessment was required, and is presented here.

On Monday, February 16, 2008 FACTs performed the on-site portion of the Preliminary Assessment.

[4] 6-CCR 1014-3, Appendix A: If, based on the totality of the circumstances, the consultant finds that insufficient evidence exists to support the hypothesis that any given area is non-compliant, that area shall be deemed to be compliant with section 25-18.5-103 (2), C.R.S., and shall be released. If objective sampling data indicates contamination is less than the cleanup level, that data may be used as *prima facie* evidence that insufficient evidence exists to support the hypothesis that any given area is non-compliant.

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). Specifically, initial entry was made into the property pursuant to Title 29 of the Code of Federal Regulations §1910.120(c)(5).

State Requirements

According to Colorado State Regulation 6-CCR 1014-3, following the "discovery" and "notification" of an illegal drug laboratory, as those terms are used in CRS §25-18.5-103, a "Preliminary Assessment" of the property must be conducted. The Preliminary Assessment must be conducted according to specified requirements[5] by an authorized Industrial Hygienist as that term is defined in CRS §24-30-1402.

PRELIMINARY ASSESSMENT

Pursuant to State regulations, during the Preliminary Assessment, the initial hypothesis is made that the subject area is clean and data is collected to find support for this hypothesis. Any reliable data that disproves the hypothesis, including police records, visual clues of illegal production, any evidence of 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.[6] 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 as related to processing, drug use, storage, or waste products.

Sampling during a Preliminary Assessment is not required. However, if performed it is conducted in the areas with the highest probability of containing the highest possible concentrations of contaminants. According to the State regulations:[7]

> *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 the regulations, information obtained during the Preliminary Assessment and those findings enter the public domain, and are not subject to confidentiality.[8]

---

[5] Section 4 of 6 CCR 1014-3
[6] Appendix A (mandatory) of 6 CCR 1014-3
[7] Section 4.6 of 6 CCR 1014-3
[8] Section 8.26 of 6 CCR 1014-3

If the Industrial Hygienist performing the assessment finds *evidence* of contamination, and no Decision Statement is issued, the property owner is required to either remediate the property or demolish the property.[9]

Normally, after the preliminary assessment is issued, the subject property is remediated, and an Industrial Hygienist must perform sampling to quantify the remaining contamination or verify that the remediation has reduced the contamination in the property to below statutory limits. If, based on the totality of the circumstances, the Industrial Hygienist fails to find sufficient evidence to support the second hypothesis that any given area is non-compliant, that area shall be deemed to be compliant and a Decision Statement shall be issued, releasing the property. If objective sampling data indicates contamination is below the cleanup levels, those data may be used as *prima facie* evidence that insufficient evidence exists to support the hypothesis that any given area is non-compliant.[10] In this case, the Preliminary Assessment lead directly to the issuing of a Decision Statement without the need for remediation.

Elements of the Preliminary Assessment

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

Mandatory Final Documents 6-CCR1014-3	**DOCUMENTATION**	**Included**
§8.1	Property description field form	✓
§8.2	Description of manufacturing methods and chemicals	✓
§8.3	Law Enforcement documentation review discussion	✓
§8.4	Description and Drawing of Storage area(s)	✓
§8.5	Description and Drawing of Waste area(s)	✓
§8.6	Description and Drawing of Cook area(s)	✓
§8.7	Field Observations field form	✓
	FACTs Functional space inventory field form	✓
§8.8	Plumbing inspection field form	✓
	FACTs ISDS field form	✓
§8.9	Contamination migration field form	✓
§8.10	Identification of common ventilation systems	✓
§8.11	Description of the sampling procedures and QA/QC	✓
§8.12	Analytical Description and Laboratory QA/QC	✓
§8.13	Location and results of initial sampling with figure	✓

Table 1
Inventory of Mandatory Information

[9] Colorado Revised Statutes §25-18.5-103

[10] No guarantee is ever made or implied that the property is completely free of contamination. Rather, a reasonable, standardized approach to decontamination is executed.

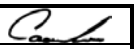
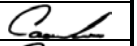
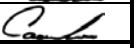
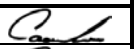
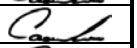
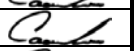
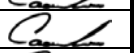
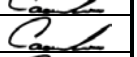
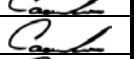
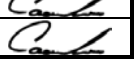
§8.14	FACTs health and safety procedures in accordance with OSHA	
§8.15	Contractor's description of decontamination procedures and each area that was decontaminated	NA
§8.16	Contractor's description of removal procedures each area where removal was conducted, and the materials removed	NA
§8.17	Contractor's description of encapsulation areas and materials	NA
§8.18	Contractor's description of waste management procedures	NA
§8.19	Drawing, location and results of final verification samples	
§8.20	FACTs Pre-remediation photographs and log	
§8.20	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	
	Analytical procedure	
§8.3	Available Law Enforcement documents	
	FACTs Field Sampling Forms	

Table 1
Inventory of Mandatory Information (continued)

Included with this discussion is a read-only CD. The digital disc contains mandatory information and photographs required by State regulation for a Preliminary Assessment and Decision Statement. Also included, is all pertinent documentation associated with the assessment. This Preliminary Assessment is not complete without the DVD and all associated support documents.

Review of Law Enforcement Documentation

As part of the Preliminary Assessment, FACTs is required by regulation[11] to review available law enforcement documents pertinent to a subject property. During this project, the Lakewood Police Department exhibited the highest level of professionalism and cooperated fully with our Preliminary Assessment; even to the extent of going out of their way to provide personal expedited service for our request. However, no documentation was available for the property vis-à-vis controlled substances. None of our other sources were able to provide any additional information for the property. Therefore, based on the best information available, there are no records available to indicate controlled substance activities at the subject property.

GOVERNING BODY

Based on the best information available, the Jefferson County Department of Environmental Health is the "Governing Body" as defined in CRS §25-18.5-101.

[11] 6 CCR 1014-3 (Section 4.2)

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

VISUAL INSPECTION OF THE PROPERTY

As part of our Preliminary Assessment, on Monday, February 16, 2009, 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.

Upon our February 16, 2009 arrival, we found the property secured, unoccupied and completely emptied of all chattels, furniture, and some major appliances.

In the drawing below, we have presented the general layout of the structure and surrounding features.

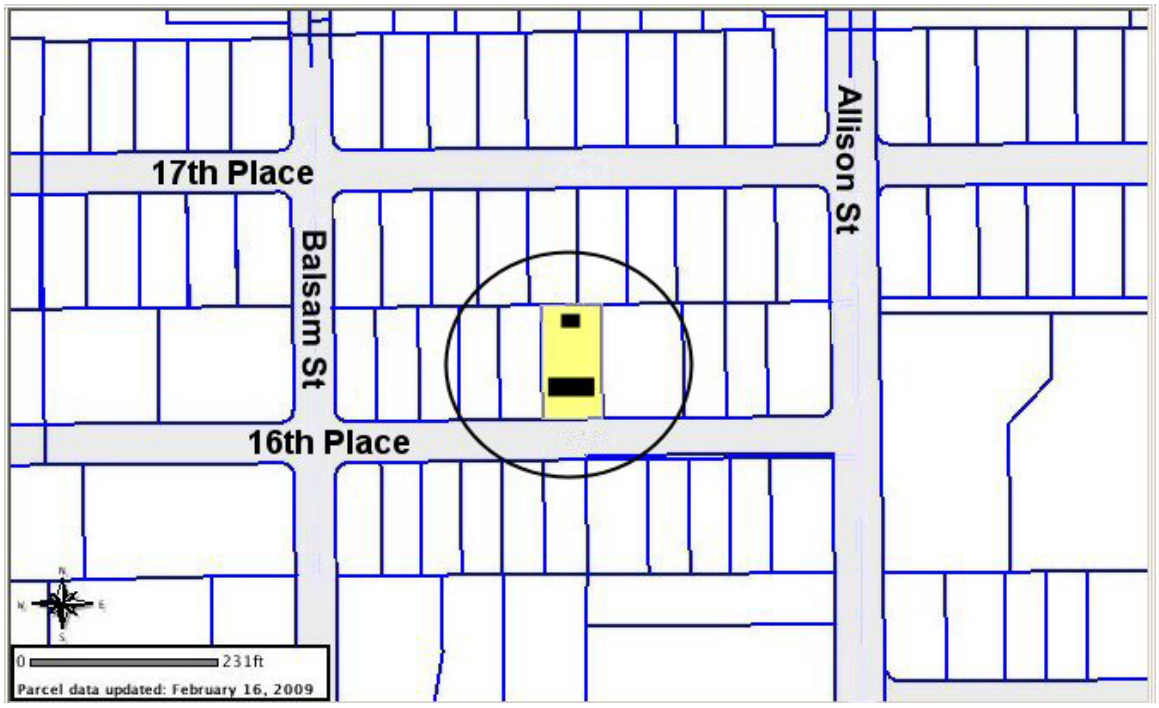


Figure 1
General Building Layout

Functional Space Summary

During a Preliminary Assessment, the Industrial Hygienist divides an area into "functional spaces" and evaluates 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 are different, kitchens and living rooms are different, etc., and a building is divided into such areas based solely on professional judgment. The following Functional Spaces have been addressed below:

Structure Number	Functional Space Number	Functional space
1	1	Converted garage
1	2	Living Room
1	3	Dining room, dining room closet, bedroom hall, bedroom hall linen closet
1	4	Southeast Bedroom and closet
1	5	Southwest Bedroom and closet
1	6	Northwest Bedroom and closet
1	7	Bathroom
1	8	Kitchen
1	9	Utility room
1	10	Attic (both halves)
1	11	Crawlspace
2	12	Shed

Table 2
Functional Space Summary

Structure Number 1- Residence

Functional Space 1: Converted Garage

This room has been converted into a living room and was delineated as the term is normally used; except that it was contiguous with the original (and still existing) living room. A single discreet wipe sample was collected from this room. The concentration of methamphetamine as determined from the discrete sample was below the detection limit of the method.

The converted garage contained some minor damage to the north wall.

Functional Space 2: Living Room

Delineated by the walls as the term is normally understood. Two discreet samples were collected from this room, one of which represented the ventilation system. The concentration of methamphetamine as determined from a discrete sample collected from this functional space was above the detection limit of the method, but below the decision threshold.

Functional Space 3: Dining Room

This area included the dining room as that term is commonly understood and also included the small closet in the dining room, the hallway leading to the bedrooms, and the linen closet in the bedroom hallway.

There were no visual indicators present in this area other than the faint yellowing on the walls which is more consistent with cigarette smoke than with iodine or mercuric chloride.

The concentration of methamphetamine as determined from a discrete sample collected from this functional space was above the detection limit of the method, but below the decision threshold.

Functional Space 4: South East Bedroom

Identified as the term is commonly used, this space also included the closet. There were no visual indicators present in this area. The concentration of methamphetamine as determined from a discrete sample collected from this functional space was above the detection limit of the method, but below the decision threshold.

Functional Space 5: South West Bedroom

Identified as that term is commonly used and included the closet. Unusual wiring existed in the closet otherwise there were no visual indicators present in this area.

The concentration of methamphetamine as determined from a discrete sample collected from this functional space was above the detection limit of the method, but below the decision threshold.

Identification of Cook/Storage Areas

Based on the best information available, we believe that methamphetamine was not prepared on site, and that the occurrence of methamphetamine was restricted to use and storage primarily in this room. Due to the distribution of methamphetamine in the house, and the use of this space, we speculate that this room was the primary point of smoking.

Functional Space 6: North West Bedroom

Identified as that term is commonly used and included the closet. Unusual wiring existed in the room, but otherwise there were no visual indicators present in this area.

The concentration of methamphetamine as determined from a discrete sample collected from this functional space was above the detection limit of the method, but below the decision threshold.

Functional Space 7: Bathroom

This room contained several visual indicators including unusual corrosion on metallic surfaces.

The concentration of methamphetamine as determined from a discrete sample collected from this functional space was below the reported detection limit.

Functional Space 8: Kitchen

Defined as that term is normally understood was contiguous with the utility room and dining room. The space did not contain any visual indicators of controlled substance activities. The concentration of methamphetamine as determined from a discrete sample collected from this functional space was above the detection limit of the method, but below the decision threshold.

Functional Space 9: Utility Room

This area is essentially the remaining portion of the garage when the garage was converted into a recreation room. We found a glass pipe in this room consistent with the type of drug paraphernalia used to smoke methamphetamine. The concentration of methamphetamine as determined from a discrete sample collected from this functional space was below the detection limit of the method.

Functional Space 10: Attic

The attic was included as a functional space since there was visual evidence of considerable use and occupancy in the eastern half of the attic. The eastern half is separated from the western half by a wall and trap door.

The concentration of methamphetamine as determined from a discrete sample collected from this functional space was above the detection limit of the method, but below the decision threshold.

Functional Space 11: Crawlspace

The crawlspace was included as a functional space since there was considerable use, occupancy and storage in the crawlspace.

The concentration of methamphetamine as determined from a discrete sample collected from this functional space was above the detection limit of the method, but below the decision threshold.

Functional Space 12: Shed

The exterior shed was emptied of virtually all contents and there were no visual indicators of controlled substance activities.

The concentration of methamphetamine as determined from a discrete sample collected from this functional space was below the detection limit of the method.

Furnace

Although the furnace in the crawlspace appeared to be quite new, the furnace appeared to be tied into existing and (possibly) original ducts. We collected a sample from the northernmost supply duct in the living room. Due to the restricted access, accurate determination of the surface was not possible, however any error associated with the estimated surface area would be insignificant in light of the low concentrations of methamphetamine reported by the laboratory. The concentration of methamphetamine as

determined from a discrete sample collected from within the duct was above the detection limit of the method, but below the decision threshold.

Exterior Grounds

Although most of the vegetation and ground cover was in its winter state, hindering the assessment of stressed vegetation, we did note two exceptional areas of stressed vegetation. One area was located in the front of the house at the southwest corner, and to a lesser extent, extending to the north-south midline of the structure. The second area was disturbed soils in the back yard along the west fence line at the north end.

Closer inspection indicated that the areas of stressed vegetation were probably not related to the release of hazardous materials or in any other way associated with clandestine drug activity. See the photo archive for photographs of the two areas.

Sample Collection

We collected samples from the subject property in an effort to support the initial hypothesis (the residence was clean (compliant)), and, if applicable, pending sample results and pending the findings of the visual assessment and law enforcement document review, to support the second hypothesis as well (that the area was not clean (noncompliant)). The samples were submitted for analysis to Analytical Chemistry Inc. in Tukwila, Washington.

To protect against the introduction of contaminants into the subject property, the Industrial Hygienist and his Technician donned fresh Tyvek® suits upon entry into the property. All equipment brought into the subject property was staged at the front door. The ladder used during our assessment had been washed at a car wash prior to entering the building.

Wipe Samples

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

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

During this project, FACTs personnel selected those areas which had the highest probability of exhibiting the highest concentrations of contamination. Based on our experience, state of the art information on indoor methamphetamine migration patterns

and professional judgment, FACTs selected specific locations throughout the structure in an attempt to represent the highest possible concentrations of methamphetamine.

Each sample area was then delineated with a measured outline.

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.

Samples were maintained in the control of FACTs at all times, and submitted under chain of custody via United Parcel Service to Analytical Chemistry, Inc. (ACI) of Tukwila, Washington. ACI is one of the laboratories identified in State regulation 6-CCR 1014-3 as being proficient in performing methamphetamine analysis.

QA/QC Precautions

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

Field Blanks

For QA/QC purposes, and in accordance with state regulations, two field blanks were randomly selected from the numbered batch, randomly inserted in the sampling sequence and submitted along with the samples for methamphetamine analysis. To ensure the integrity of the blank, FACTs personnel were unaware, until the actual time of sampling, which specific samples would be submitted as a blank. To ensure the integrity of the blank, laboratory personnel were not informed which specific samples were blanks (if any at all). The history of the FACTs field blank media has demonstrated a media and solvent contamination level below the analytical detection limit for the method.

Field Duplicates

For the purposes of the data quality objectives associated with this Preliminary Assessment, no duplicates were required, and none were collected.

Cross Contamination

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

Collection Rationale

The samples that were collected throughout the subject property comprised of “discreet” samples. Discreet samples are collected at a single isolated location. In the following table, the Decision Threshold is that value below which the sample result would need to be to confirm compliance.

Sample Results

Sample ID	Sample Location	Area Sampled cm2	Result µg/100cm2	Decision Threshold µg/100cm2	Decision Status
16M021609-1	Converted garage track light	555	<0.01	0.5	PASS
16M021609-2	Living room ceiling fan	581	0.03	0.5	PASS
16M021609-3	Dining room ceiling fan	581	0.03	0.5	PASS
16M021609-4	SE Bedroom Ceiling fan	610	0.03	0.5	PASS
16M021609-5	SW Bedroom ceiling fan	511	0.03	0.5	PASS
16M021609-6	Field Blank	NA	<0.03	0.03	PASS
16M021609-7	NW Bedroom ceiling fan	581	0.02	0.5	PASS
16M021609-8	Field Blank	NA	<0.03	0.03	PASS
16M021609-9	Bathroom medicine cabinet	604	<0.01	0.5	PASS
16M021609-10	Kitchen top of refrigerator	523	0.01	0.5	PASS
16M021609-11	Utility room back door	542	<0.01	0.5	PASS
16M021609-12	Attic duct	523	0.04	0.5	PASS
16M021609-13	Crawlspace metal pipe	516	0.03	0.5	PASS
16M021609-14	Ventilation supply duct in living room	929	0.02	0.5	PASS
16M021609-15	Shed, east window	523	<0.01	0.5	PASS

The symbol "<" indicates that methamphetamine was not detected at the detection limit expressed.

Table 3
Summary of Sample Results

Sample Locations

In the figures that follow, the sample locations from the Preliminary Assessment have been presented. The locations of the initial (cursory) samples are not required by regulation and, for clarity, are not depicted. The drawings are stylized and not to scale.

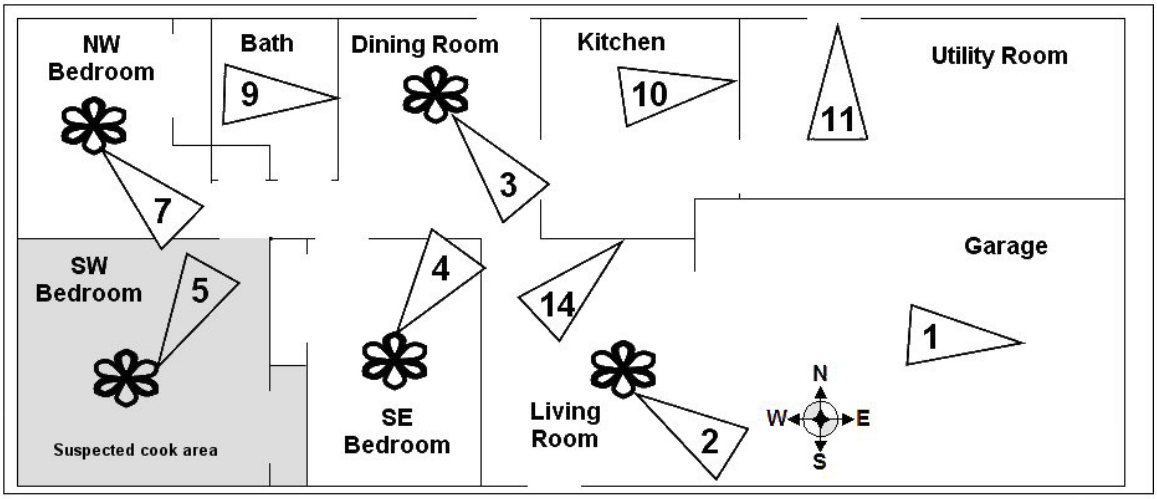


Figure 2
Sampling Locations Main Floor
Not to Scale

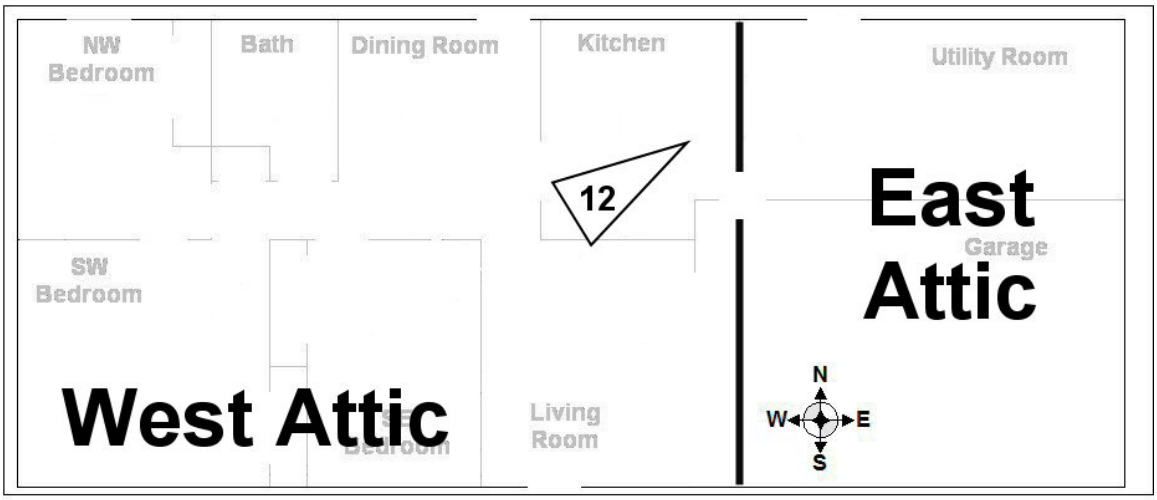


Figure 3
Sampling Location Attic
Not to Scale

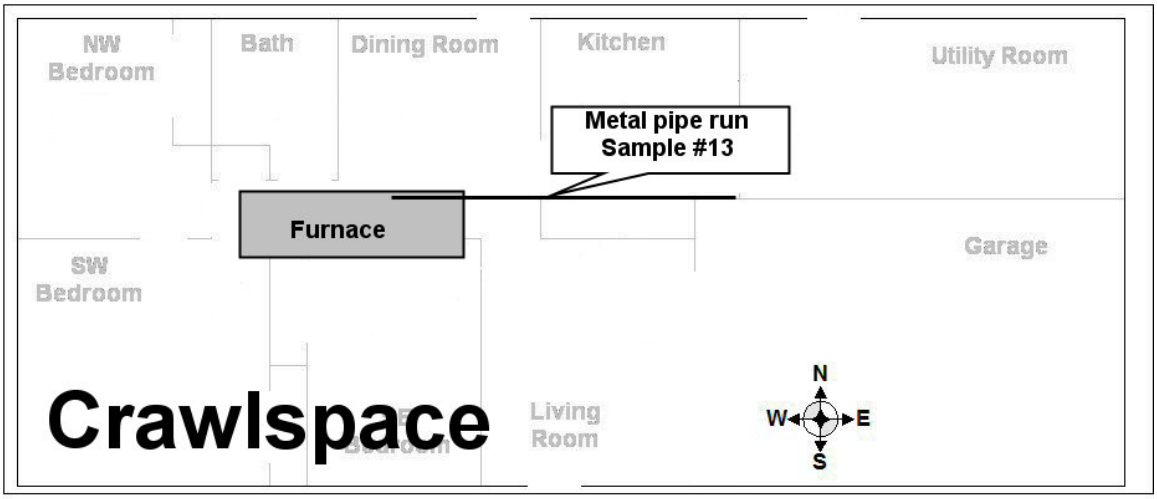


Figure 4
Sampling Location Crawlspace
Not to Scale

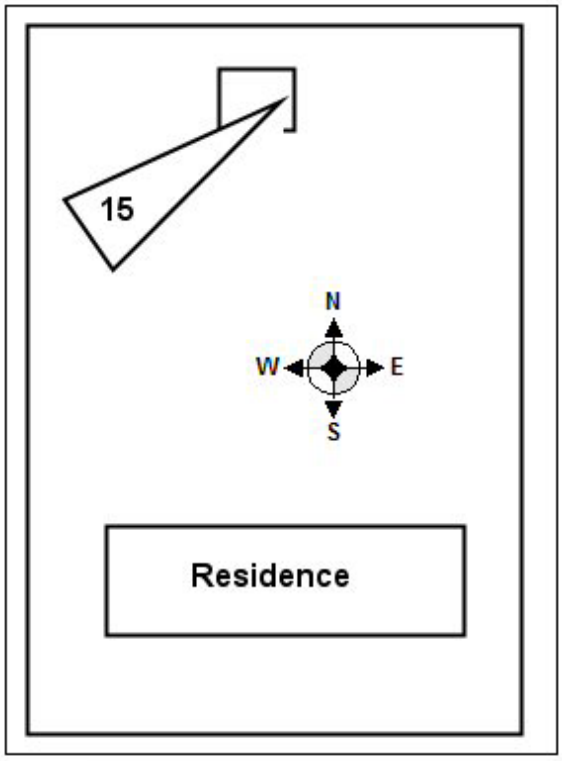


Figure 5
Sampling Location Shed
Not to Scale

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 0.1 µg (RPD 3%, recovery =103%); Matrix spike 0.020 µg (RPD 10.5%; recovery 90%); Matrix spike Dup 0.020 µg; (RPD 10.5%; recovery 90%); Surrogate recovery (all samples): High 110% (Sample 3 and 11), Low 101% (Sample 1); FACTs reagents: MeOH lot #A0801 <MDL for n=4; Gauze lot G0901 <MDL for n=2.

The QA/QC indicate the data met the data quality objectives; and the results appear to be biased slightly high (that is, the samples may contain less methamphetamine than reported by the laboratory).

CONCLUSIONS

Based on the totality of the circumstances, sampling, and a review of pertinent available Law Enforcement documents, our subjective observations and objective data from

sampling, and in strict adherence to State statutes and State regulations, FACTs concludes the following:

- An illegal drug lab, as that term is defined in CRS §25-18.5-101, existed at the property.

- A Class 1 Public Nuisance, as defined in CRS §16-13-303(1) existed at the property.

- Trace concentrations of methamphetamine were confirmed to be present at the property in isolated areas.

- The concentrations of methamphetamine in the subject property were not sufficiently elevated to be considered a "contaminant" as that term is defined in 6 CCR 1014-3 (§3).

- Final verification sampling indicates the property is compliant.

- FACTs hereby issues, by virtue of this document, a *Decision Statement* affirming that:

    a. The initial hypothesis was rejected and the initial null hypothesis was accepted (sufficient evidence existed to confirm the presence of methamphetamine).

    b. Upon the performance of the required *Preliminary Assessment* the second hypothesis was contemporaneously tested, and no support for the hypothesis was found; the null hypothesis was subsequently accepted (in the totality of the circumstances the property was found to be compliant).

- No harmful chemical residues were found at concentrations that may present an immediate or long-term threat to human health and/or the environment.

- Therefore, pursuant to this *Decision Statement,* the property is to be released for immediate occupancy without the need for any further action.

RECOMMENDATIONS

The methpipe, which was left at its original location in the property (on top of the electrical control box in the utility room), should be removed and properly discarded.

The crawlspace should be removed of all contents and discarded.

The attic should be removed of all contents and discarded.

To avail of the civil liability immunity provided by CRS §25-18.5-103(2) and to ensure complete compliance with State regulations, this Preliminary Assessment and Decision

Statement must be submitted to the Governing Body with jurisdiction over the property. Based on the best information available, The Governing Body is

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

FACTs has supplied a copy of this document complete with all appendices and the digital disc to the Governing Body via email and registered mail through the US Post Office.

Enclosures: One CD; Data package, and Appendices

Appendix A:

Supporting Documents

FACTs project name: 16th Place	Form # ML1
Date: Feb 16, 2009	
Reporting IH:	Caoimhín P. Connell, Forensic IH

PROPERTY DESCRIPTION:

Physical address	8105 W 16th Place Lakewood, CO 80214-6052		
Legal description or VIN	Schedule: 051054 Parcel ID: 39-353-12-016 Type: Residential Neighborhood: 2424 (Crown Hill, Glen Creighton, Kawanee, Hillcrest) Lot 0006 and 0007; Key 00A; Section 35; Township 3; Range 69		
Registered Property Owner	GMAC MORTGAGE LLC 01100 VIRGINIA DR FORT WASHINGTON PA 19034		
Number of structures	Two		
Type of Structures (Each affected structure will need a "Functional Space" inventory)	1: Residential structure	1,692	Square feet
	2:	96	Square feet
	3:		Square feet
	4:		Square feet
	5:		Square feet
	6: Total Lab Space	1,788	Square feet
Adjacent and/ or surrounding properties	1: North: Residential Structure 2: South: Residential paved road 3: East: Residential Structure 4: West: Residential Structure		
General Property Observations	Well kempt property and structure with minor cosmetic damage		
Presumed Production Method	Smoking (meth pipe located in residence)		

Plumbing Inspection and Inventory

FACTs project name: 16th Place	Form # ML2
Date: Feb 16, 2009	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Functional Space	Room	Fixture	Indicia?	Comments
7	Bathroom # 1	Bath	N	
7	Bathroom # 1	Shower	N	
7	Bathroom # 1	Sink	N	
7	Bathroom # 1	Toilet	N	
8	Kitchen	Sink	N	
8	Kitchen	Dishwasher	N	
	Missing	Washing machine		
	Missing	Slop sink		

Ventilation Inspection and Inventory

Item	Y/N	Indicia ?	Sampled ?	Comments
Isolated AHU?	Y	N		
Common air intake?	N	N		
Common bathroom exhausts?	N	N		
Forced air system?	Y	N		
Steam heat?	N	N		
Common ducts to other properties?	N	N		
Passive plena to other properties?	N	N		
Active returns to other properties?	N	N		
Passive wall grilles to other properties?	N	N		
Industrial ventilation?	N	N		
Residential ventilation?	Y	N	Y	
Pressurized structure?	N	N		

Functional Space Inventory

FACTs project name: 16th Place	Form # ML3
Date: Feb 16, 2009	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Structure Number	Functional Space Number	Indicia (Y/N)	Describe the functional space (See drawings and body of report for delineating structural features)
1	1	Y	Converted garage
1	2	Y	Living Room
1	3	Y	Dining room, dining room closet, bedroom hall, bedroom hall linen closet
1	4	Y	Southeast Bedroom and closet
1	5	Y	Southwest Bedroom and closet
1	6	Y	Northwest Bedroom and closet
1	7	Y	Bathroom
1	8	Y	Kitchen
1	9	Y	Utility room
1	10	Y	Attic (both halves)
1	11	Y	Crawlspace
1	12	N	Shed

Law Enforcement Documentation

FACTs project name: 16th Place	Form # ML4
Date: Feb 16, 2009	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Inventory of Reviewed Documents	1: No docs available. Lakewood PD records office reviewed available documentation and was unable to locate calls or narrative associated with the property.
Described method(s) of production	Presumed smoking only – no evidence of production
Chemicals identified by the LEA as being present	None
Cooking areas identified	Smoking probably occurred throughout the residence, mostly in the master bedroom
Chemical storage areas identified	None
LE Observation on areas of contamination or waste disposal	None

FORENSIC APPLICATIONS CONSULTING TECHNOLOGIES, INC.

February 12, 2009

Lakewood Police Dept.
Records Division
480 S. Allison Pkwy.
Lakewood, CO 80226

Via Fax: 720-913-7035

To Whom It May Concern:

Forensic Applications, Inc. has been contracted to perform a "Preliminary Assessment" at an identified 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 Lakewood at:

8105 W 16th Place Lakewood, CO 80214-6052

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 or call histories 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 Jefferson County Department of Health.

We will be performing the on-site assessment on February 17, 2009, and will need to review documents before then. We apologize for the short notice, however, we generally do not have any control over the timeframes involved.

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

I affirm that upon receipt of requested records of official actions and/or criminal justice records from the Lakewood Police Department, such records shall not be used for the direct solicitation of business for pecuniary gain, pursuant to CRS 24-72-305.5

Sincerely,

Caoimhín P. Connell
Forensic Industrial Hygienist

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

City of Lakewood

Kevin Paletta, Chief of Police
Lakewood Police Department
Records Section

445 South Allison Parkway
Lakewood, Colorado 80226-3106
303/987-7331 FAX: 303/987-7359

February 16, 2009

Caoimhin P. Connell
Forensic Applications Consulting Technologies, Inc.
185 Bounty Hunter's Lane
Bailey, CO 80421

Reference: 8105 West 16th Place, Lakewood, Colorado

In your letter, dated February 12, 2008, you requested to "review any narratives or call histories regarding controlled substances or hazardous materials responses. . ." regarding the above referenced address.

A search of our files shows that there have been no hazardous material or controlled substance related calls to this address during the four year period that you requested.

Due to the urgency of your request, we have processed your request and faxed the results to the number listed in your letter. We are also sending you a hard copy of the same information to the address listed on your request.

The Lakewood Police Department charges a processing fee for report or search requests. Enclosed is a copy of our cost schedule. Payment is due at the time of the request and is non-refunable. Payment will need to accompany any future requests or they will not be processed.

Kevin Paletta
Chief of Police

Jane R. McElroy

Jane R. McElroy, Manager
Support Services Division
Records Section

lw

Field Observations

FACTs project name: 16th Place	Form # ML5
Date: Feb 16, 2009	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Structure: Residence and Shed

Indicator	Functional Space	Indicator	Functional Space
Hydrogen peroxide	Not observed	Iodine	Not observed
Acids	Not observed	Kitty litter	Not observed
Aerosol cans	11	Lead	Not observed
Alcohols (MeOH, EtOH)	Not observed	Lithium	Not observed
Ammonia	Not observed	Match components	Not observed
Ammunition	Not observed	Mercury	Not observed
Artistic expressions	Not observed	Methamphetamine	2, 3, 4, 5, 6, 8, 10, 11
Bags of salt	Not observed	Modified coolers	Not observed
Bases	Not observed	Needles/Syringes	Not observed
Basters/Pipettes	Not observed	Other OTC	Not observed
Batteries	Not observed	pH papers/indicators	Not observed
Bi-phasic wastes	Not observed	Phenyl-2-propanone	Not observed
Booby traps (trips, triggers, etc)	Not observed	Pornography, Sex toys	Not observed
Bullet holes	Not observed	Presence of cats	Not observed
Burn marks	Not observed	Pseudoephedrine	Not observed
Chemical storage	11	Red P	Not observed
Colored wastes	11	Smoke detectors disabled	Not observed
Corrosion on surfaces	7	Solvents - ketones, etc	Not observed
Vandalism (damage)	1, 7	Solvents -aromatics	Not observed
Drug paraphernalia	9 (meth pipe)	Squalor	1
Empty OTC Containers	Not observed	Staining on floors	1
Ephedrine	Not observed	Structural damage/modifications	Not observed
Faeces	Not observed	Unusual wiring	5
Filters	Not observed	Urine containers	Not observed
Forced entry marks	Not observed	Weapons	Not observed
Gas cylinders	Not observed	Yellow staining	1
Gerry cans	Not observed	**Xxxxxxxxxxxxxx**	**Xxxxxxxxxxxxxx**
Glassware	11	**Xxxxxxxxxxxxxx**	**Xxxxxxxxxxxxxx**
Heating mantle	Not observed	**Xxxxxxxxxxxxxx**	**Xxxxxxxxxxxxxx**
Heet or similar (MeOH)	Not observed	**Xxxxxxxxxxxxxx**	**Xxxxxxxxxxxxxx**

Notes

① Present but not as indicia

② Copious or unusual quantities

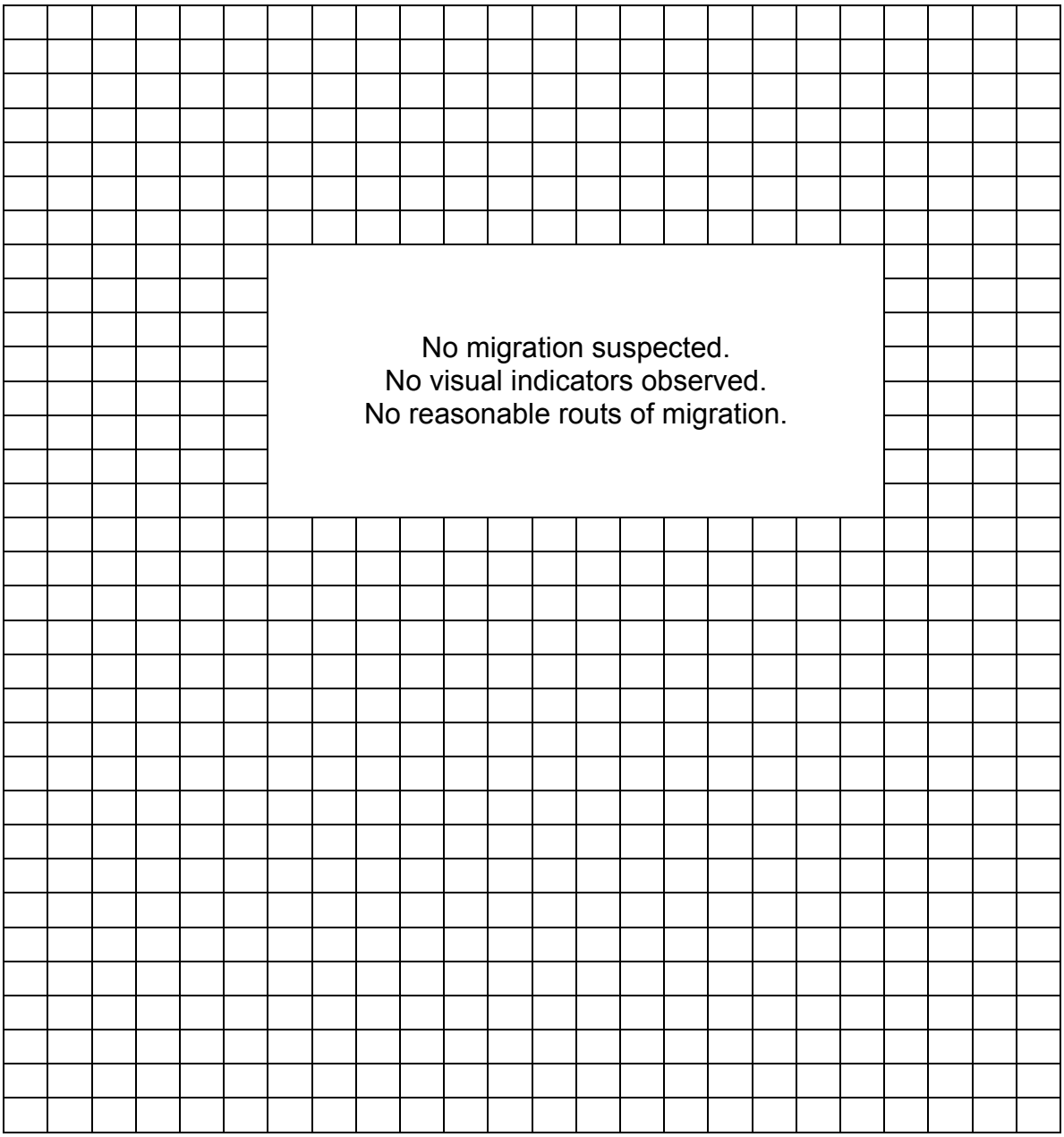
③ Present in normal household expectations

④ Modified in manner consistent with clanlab use

Contaminant Migration Observations

FACTs project name: 16th Place	Form # ML6
Date: Feb 16, 2009	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Describe/identify adjacent areas where contaminants may have migrated.



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

Describe the area:_____

_____

_____

_____

Individual Sewage Disposal System Field Form

FACTs project name: 16th Place	**Form # ML7**
Date: Feb 16, 2009	
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		X	
Are solvent odors present from the internal drains		X	
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 vapours measured in the septic tank (if "yes" see below)			NA
Is there evidence of wastes being disposed down internal drains		X	
Is sampling of the ISDS warranted			NA
Were calawasi/drum thief samples collected from the septic tank			NA

*NC = Not checked

Qualitative Organic Vapor Monitoring

Hydrocarbon detector model	EnMet Target Series, MOS detector
NA	NA

Location	MOS*	PID*	FID*
NA	NA	NA	NA

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

Pre-Remediation Photograph Log Sheet

FACTs project name: 16th Place	Form # ML8
Date: Feb 16, 2009	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Name	Date taken
Attic	2/16/2009 15:16
Attic (2)	2/16/2009 15:16
Attic (3)	2/16/2009 15:17
Attic (4)	2/16/2009 15:17
Attic (5)	2/16/2009 15:17
Attic (6)	2/16/2009 15:18
Attic (7)	2/16/2009 15:18
Attic (8)	2/16/2009 15:18
Attic (9)	2/16/2009 15:21
Attic (10)	2/16/2009 15:21
Attic (11)	2/16/2009 15:21
Attic (12)	2/16/2009 15:21
Attic (13)	2/16/2009 15:22
Attic (14)	2/16/2009 15:25
Attic (15)	2/16/2009 15:25
Attic (16)	2/16/2009 15:26
Attic (17)	2/16/2009 15:27
Bath	2/16/2009 14:06
Bath (2)	2/16/2009 14:12
Bath (3)	2/16/2009 14:12
Bath (4)	2/16/2009 14:12
Bath (5)	2/16/2009 14:12
Bath (6)	2/16/2009 14:58
Bath (7)	2/16/2009 14:58

Name	Date taken
Bath (8)	2/16/2009 15:00
Bath (9)	2/16/2009 15:00
Bath (10)	2/16/2009 15:00
Bath (11)	2/16/2009 15:01
Bath (12)	2/16/2009 15:01
Bedroom hall	2/16/2009 14:04
Bedroom hall (2)	2/16/2009 14:09
Bedroom hall (3)	2/16/2009 14:09
BR Hall closet	2/16/2009 14:11
BR Hall closet (2)	2/16/2009 14:11
Crawlspace	2/16/2009 15:30
Crawlspace (2)	2/16/2009 15:30
Crawlspace (3)	2/16/2009 15:30
Crawlspace (4)	2/16/2009 15:30
Crawlspace (5)	2/16/2009 15:31
Crawlspace (6)	2/16/2009 15:31
Crawlspace (7)	2/16/2009 15:31
Crawlspace (8)	2/16/2009 15:32
Crawlspace (9)	2/16/2009 15:32
Crawlspace (10)	2/16/2009 15:37
Crawlspace (11)	2/16/2009 15:37
Crawlspace (12)	2/16/2009 15:37
Crawlspace (13)	2/16/2009 15:38
Dining	2/16/2009 14:01

Pre-Remediation Photograph Log Sheet

FACTs project name: 16th Place	Form # ML8
Date: Feb 16, 2009	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Name	Date taken
Dining (2)	2/16/2009 14:03
Dining (3)	2/16/2009 14:07
Dining (4)	2/16/2009 14:09
Dining (5)	2/16/2009 14:09
Dining (6)	2/16/2009 14:09
Dining (7)	2/16/2009 14:29
Dining (8)	2/16/2009 14:30
Dining (9)	2/16/2009 14:31
Dining (10)	2/16/2009 14:32
Dining (11)	2/16/2009 14:32
Dining (12)	2/16/2009 14:32
Dining (13)	2/16/2009 14:33
Entrance	2/16/2009 14:01
Entrance (2)	2/16/2009 14:01
Exterior	2/16/2009 13:40
Exterior (2)	2/16/2009 13:40
Exterior (3)	
Exterior (4)	2/16/2009 13:41
Exterior (5)	2/16/2009 13:42
Exterior (6)	2/16/2009 13:42
Exterior (7)	2/16/2009 13:43
Exterior (8)	2/16/2009 13:47
Exterior (9)	2/16/2009 13:47
Exterior (10)	2/16/2009 13:47

Name	Date taken
Exterior (11)	2/16/2009 13:47
Exterior (12)	2/16/2009 13:47
Exterior (13)	
Exterior (14)	2/16/2009 13:48
Exterior (15)	2/16/2009 13:48
Exterior (16)	2/16/2009 13:48
Exterior (17)	2/16/2009 13:48
Exterior (18)	2/16/2009 13:49
Exterior (19)	2/16/2009 13:50
Exterior (20)	
Garage	2/16/2009 14:01
Garage (2)	2/16/2009 14:01
Garage (3)	2/16/2009 14:03
Garage (4)	2/16/2009 14:03
Garage (5)	2/16/2009 14:17
Garage (6)	2/16/2009 14:19
Garage (7)	2/16/2009 14:20
Garage (8)	2/16/2009 14:20
Kitchen	2/16/2009 14:06
Kitchen (2)	2/16/2009 14:07
Kitchen (3)	2/16/2009 14:07
Kitchen (4)	2/16/2009 14:07
Kitchen (5)	2/16/2009 14:08
Kitchen (6)	2/16/2009 15:03

Pre-Remediation Photograph Log Sheet

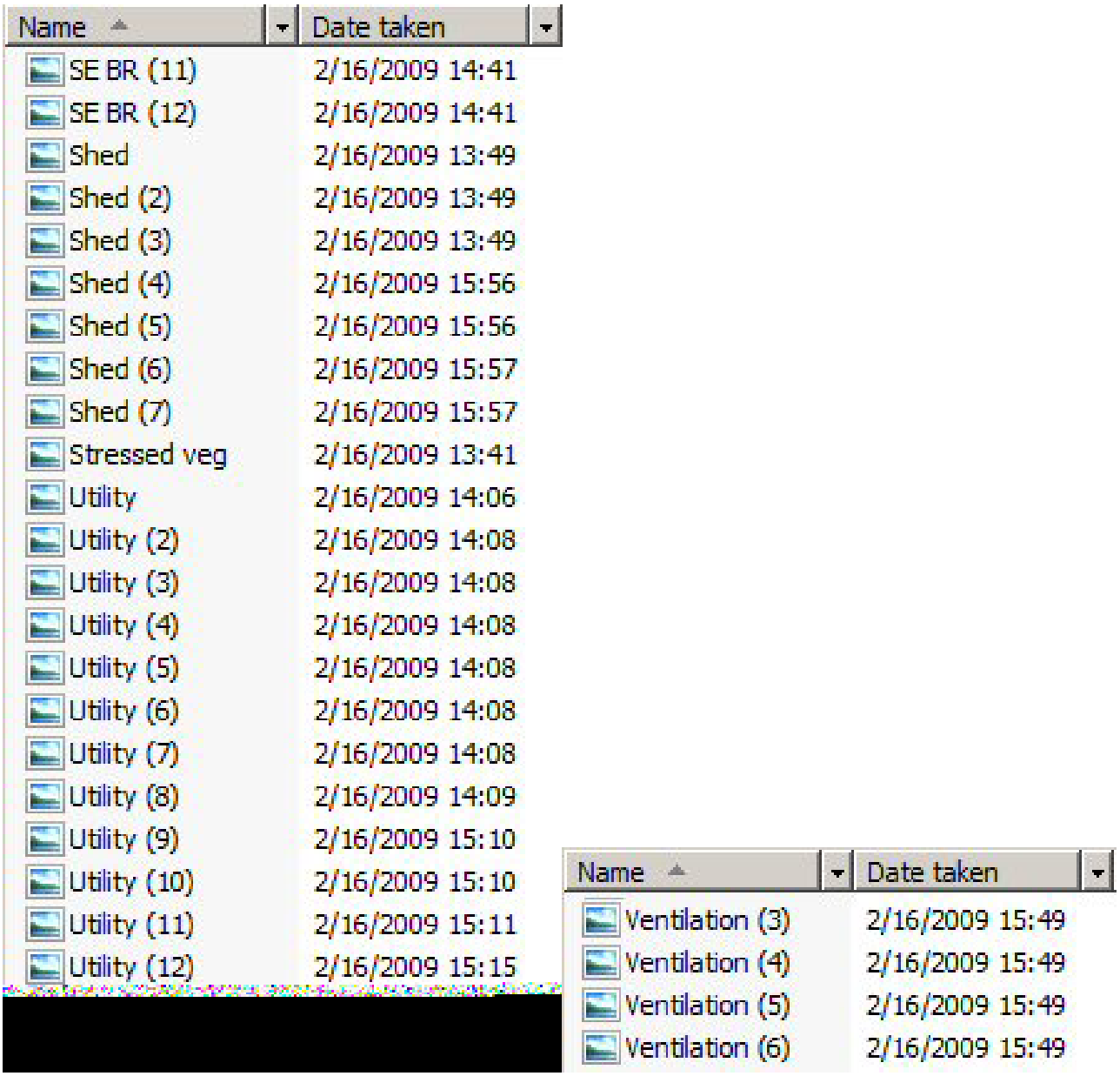
FACTs project name: 16th Place	Form # ML8
Date: Feb 16, 2009	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Name	Date taken
Kitchen (7)	2/16/2009 15:05
Kitchen (8)	2/16/2009 15:05
Kitchen (9)	2/16/2009 15:05
Kitchen (10)	2/16/2009 15:05
Kitchen (11)	2/16/2009 15:07
Ladder Decon	2/16/2009 13:25
Ladder Decon (2)	2/16/2009 13:25
Ladder Decon (3)	2/16/2009 13:27
Ladder Decon (4)	2/16/2009 13:28
Living room	2/16/2009 14:01
Living room (2)	2/16/2009 14:01
Living room (3)	2/16/2009 14:07
Living room (4)	2/16/2009 14:22
Living room (5)	2/16/2009 14:24
Living room (6)	2/16/2009 14:25
Living room (7)	2/16/2009 14:25
Living room (8)	2/16/2009 14:26
Living room (9)	2/16/2009 16:00
Living room (10)	2/16/2009 16:01
Living room (11)	2/16/2009 16:01
Living room (12)	2/16/2009 16:01
Master BR	2/16/2009 14:10
Master BR (2)	2/16/2009 14:10
Master BR (3)	2/16/2009 14:10

Name	Date taken
Master BR (4)	2/16/2009 14:10
Master BR (5)	2/16/2009 14:49
Master BR (6)	2/16/2009 14:49
Master BR (7)	2/16/2009 14:51
NW BR	2/16/2009 14:05
NW BR (2)	2/16/2009 14:10
NW BR (3)	2/16/2009 14:10
NW BR (4)	2/16/2009 14:10
NW BR (5)	2/16/2009 14:53
NW BR (6)	2/16/2009 14:54
NW BR (7)	2/16/2009 14:55
NW BR (8)	2/16/2009 14:55
NW BR (9)	2/16/2009 14:56
NW BR (10)	2/16/2009 14:57
SE BR	2/16/2009 14:04
SE BR (2)	2/16/2009 14:05
SE BR (3)	2/16/2009 14:09
SE BR (4)	2/16/2009 14:09
SE BR (5)	2/16/2009 14:09
SE BR (6)	2/16/2009 14:35
SE BR (7)	2/16/2009 14:39
SE BR (8)	2/16/2009 14:40
SE BR (9)	2/16/2009 14:40
SE BR (10)	2/16/2009 14:40

Pre-Remediation Photograph Log Sheet

FACTs project name: 16th Place	Form # ML8
Date: Feb 16, 2009	
Reporting IH:	Caoimhín P. Connell, Forensic IH



Name	Date taken
SE BR (11)	2/16/2009 14:41
SE BR (12)	2/16/2009 14:41
Shed	2/16/2009 13:49
Shed (2)	2/16/2009 13:49
Shed (3)	2/16/2009 13:49
Shed (4)	2/16/2009 15:56
Shed (5)	2/16/2009 15:56
Shed (6)	2/16/2009 15:57
Shed (7)	2/16/2009 15:57
Stressed veg	2/16/2009 13:41
Utility	2/16/2009 14:06
Utility (2)	2/16/2009 14:08
Utility (3)	2/16/2009 14:08
Utility (4)	2/16/2009 14:08
Utility (5)	2/16/2009 14:08
Utility (6)	2/16/2009 14:08
Utility (7)	2/16/2009 14:08
Utility (8)	2/16/2009 14:09
Utility (9)	2/16/2009 15:10
Utility (10)	2/16/2009 15:10
Utility (11)	2/16/2009 15:11
Utility (12)	2/16/2009 15:15

Name	Date taken
Ventilation (3)	2/16/2009 15:49
Ventilation (4)	2/16/2009 15:49
Ventilation (5)	2/16/2009 15:49
Ventilation (6)	2/16/2009 15:49

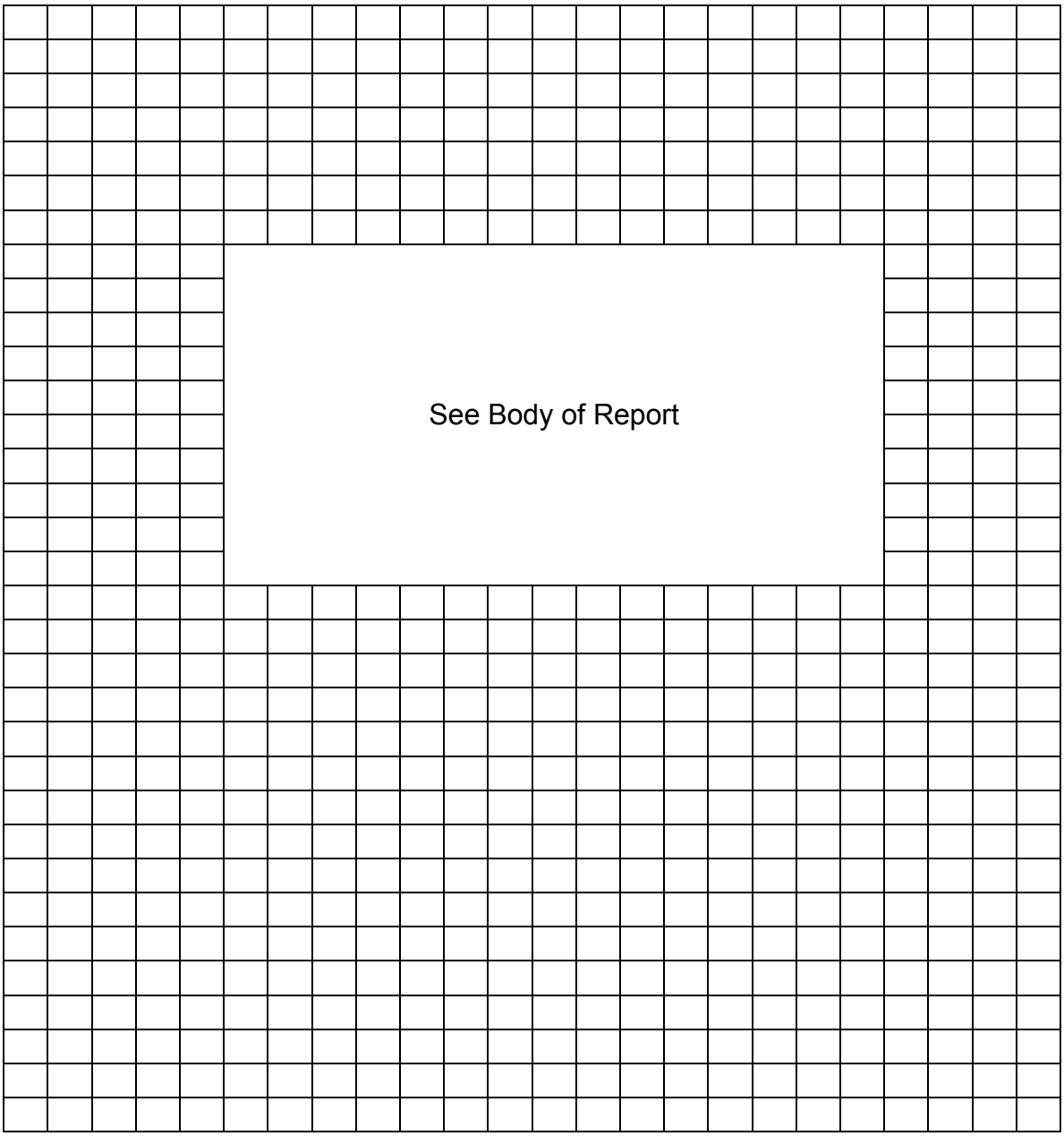
Post-Remediation Photograph Log Sheet

FACTs project name: 16th Place	**Form # ML9**
Date: Feb 16, 2009	
Reporting IH:	**Caoimhín P. Connell, Forensic IH**

Not Applicable

Drawing of Cook Area(s)

FACTs project name: 16th Place	Form # ML10
Date: Feb 16, 2009	
Reporting IH:	Caoimhín P. Connell, Forensic IH



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

Describe the area:_____

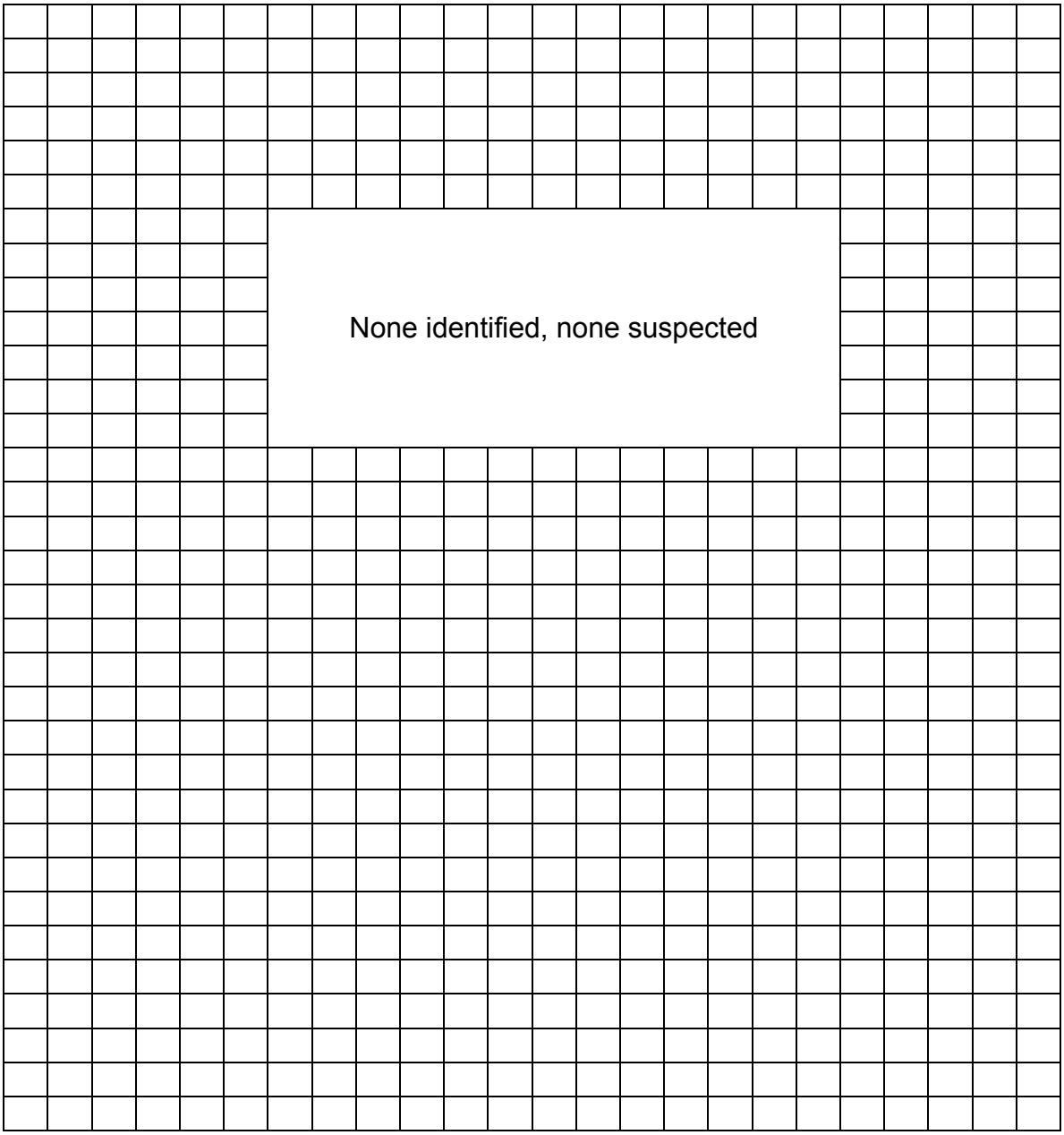
_____

_____

_____

Drawing of Storage/Disposal Area(s)

FACTs project name: 16th Place	Form # ML11
Date: Feb 16, 2009	
Reporting IH:	Caoimhín P. Connell, Forensic IH



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

Describe the area:_____

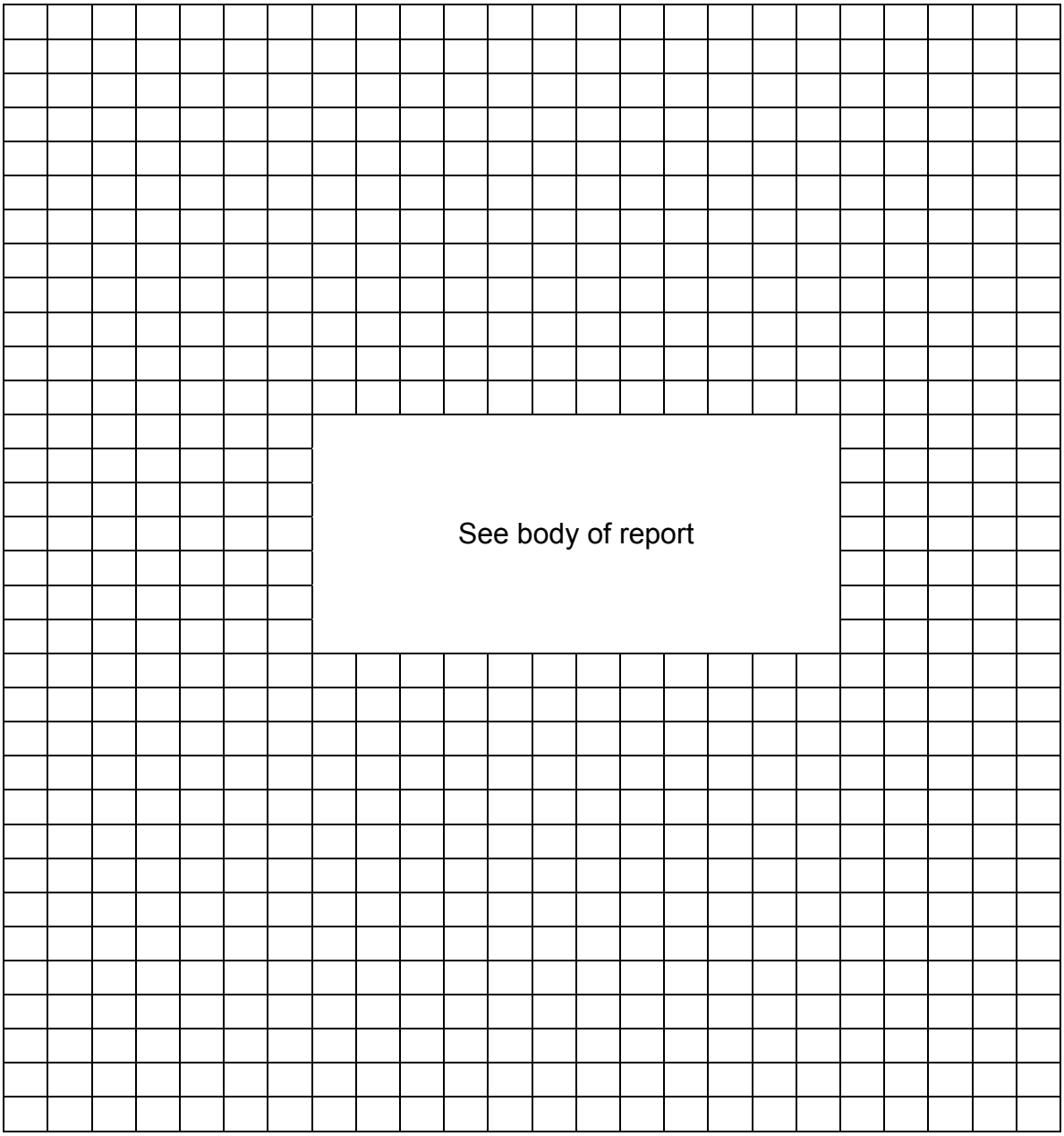
_____

_____

_____

Drawing of General Lab Area

FACTs project name: 16th Place	Form # ML12
Date: Feb 16, 2009	
Reporting IH:	Caoimhín P. Connell, Forensic IH



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

Describe the area:_____

_____

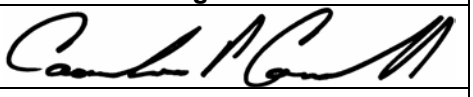
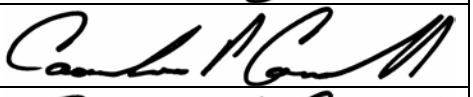
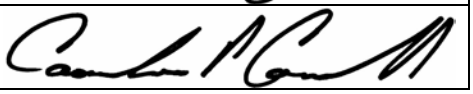
_____

_____

Certification, Variations and Signature sheet

FACTs project name: 16th Place	**Form # ML14**
Date: Feb 16, 2009	
Reporting IH:	**Caoimhín P. Connell, Forensic IH**

Certification

Statement	Signature
I do hereby certify that I conducted a preliminary assessment of the subject property in accordance with 6 CCR 1014-3, § 4.	
I do hereby certify that the property has been decontaminated in accordance with the procedures set forth in 6 CCR 1014-3, § 5.	Not Applicable
I do hereby certify that I conducted post-decontamination clearance sampling in accordance with 6 CCR 1014-3, §6.	
I do hereby certify that the cleanup standards established by 6 CCR 1014-3, § 7 have been met as evidenced by testing I conducted.	
I do hereby certify that the analytical results reported here are faithfully reproduced.	

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

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: March 2, 2009

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:	**16th Place**	**Form # ML15**
Date: Feb 16, 2009		
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 110 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

Final Documentation Checklist

FACTs project name: 16th Place	Form # ML16
Date: Feb 16, 2009	
Reporting IH:	Caoimhín P. Connell, Forensic IH

Mandatory Final Documents 6-CCR 1014-3	DOCUMENTATION	Included
§8.1	Property description field form	✓
§8.2	Description of manufacturing methods and chemicals	✓
§8.3	Law Enforcement documentation review discussion	✓
§8.4	Description and Drawing of Storage area(s)	✓
§8.5	Description and Drawing of Waste area(s)	✓
§8.6	Description and Drawing of Cook area(s)	✓
§8.7	Field observations field form	✓
	FACTs Functional Space inventory field form	✓
§8.8	Plumbing inspection field form	✓
	FACTs ISDS field form	✓
§8.9	Contamination migration field form	✓
§8.10	Identification of common ventilation systems	✓
§8.11	Description of the sampling procedures and QA/QC	✓
§8.12	Analytical Description and Laboratory QA/QC	✓
§8.13	Location and results of initial sampling with figure	✓
§8.14	FACTs health and safety procedures in accordance with OSHA	✓
§8.15	Contractor's description of decontamination procedures and each area that was decontaminated	NA
§8.16	Contractor's description of removal procedures each area where removal was conducted, and the materials removed	NA
§8.17	Contractor's description of encapsulation areas and materials	NA
§8.18	Contractor's description of waste management procedures	NA
§8.19	Drawing, location and results of final verification samples	✓
§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 Field Sampling Forms	✓

Appendix B

Analytical Reports for FACTs Samples

SAMPLING FIELD FORM

FACTs project name: 16th Place	**Form # ML17**
Date: February 16, 2009	**Alcohol Lot#:** AØ8Ø1 **Gauze Lot#:** GØ9Ø1
Reporting IH: Caoimhín P. Connell, Forensic IH	**Preliminary X Intermediate____ Final _____**

Sample ID 16MØ216Ø9-	Type	Area/ Volume/ Weight	Location	Func. Space	Dimensions	Substrate	Result
-Ø1	W		Converted Garage (ceiling by mfr lighting)	1	4 3 x 2	PT DW	
-Ø2	W		LR - ceiling FAN	2	6 x 5 x 3	VARN WOOD	
-Ø3	W		DR - ceiling FAN	3	6 x 5 x 3	VARN WOOD	
-Ø4	W		SE BEDROOM - ceiling FAN	4	6 x 5 1/4 x 3	PT WOOD	
-Ø5	W		SW BEDROOM - clg FAN - METAL CASING	5	SEE NOTES	METAL	
-Ø6	W		BX				
-Ø7	W		NW BDRM -	6	6 x 5 x 3	~~VARN~~ PLASTIC ~~WOOD~~	
-Ø8	W		BX				
-Ø9	W		BATHROOM - VAR. WOOD CABINET INT. SHELVES	7	3 1/2 x 26 3	VARN WOOD	
-1Ø	W		KITCHEN - TOP OF REFRIGERATOR	8	9 x 9	METAL	
-11	W		UTILITY RM - BACK DOOR	9	14 x 6	PTD WOOD	
-12	W		ATTIC - DUCT	10	18 x 4 1/2	GALV METAL	
-13	W		CRAWLSPACE - 1" pipe x 80" RUN	11	1 x 80	METAL	
-14	W		~~CRAWLSPACE~~ - FURNACE SUPPLY	~~11~~ N/A	12 x 6 & 2	METAL	
-15	W		SHED	12	9 x 9	PLASTIC	

Sample Types: W=Wipe; V=Microvacuum; A=Air; B=Bulk; L=liquid
Surfaces: DW= Drywall, PW= Painted wood, LW= Laminated wood, VW= Varnished wood, M= Metal, C=Ceramic

NOTES

#4 = 10% UNDERSAMPLED
5 = RADIUS = ~~4 1/2~~ 5 (TOP) R = 2 1/2 (BTM CRCL)
#10 - 50% UNDERSAMPLE
((AUTH. BIASED SAMPLING) → ALL 2/16/09 SAMPLES)
5/12 ATTIC - HEAVY USE
#14 FURNACE SUPPLY - LR
#15 SHED IS 12 x 8
pipe on top of elec. box in UTILITY ROOM (GE Box)

ANALYTICAL CHEMISTRY INC.

Established in 1979

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

Website: www.acilabs.com

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

Lab Reference:	09111-10
Date Received:	February 20, 2009
Date Completed:	February 24, 2009

February 24, 2009

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

CLIENT REF: 16th Place

SAMPLES: wipes/15

ANALYSIS: Methamphetamine by Gas Chromatography-Mass Spectrometry.

RESULTS: in total micrograms (ug)

Sample	***Methamphetamine, ug***	***% Surrogate Recovery***
16M021609 - 01	< 0.030	101
16M021609 - 02	0.152	107
16M021609 - 03	0.141	110
16M021609 - 04	0.141	109
16M021609 - 05	0.134	109
16M021609 - 06	< 0.030	105
16M021609 - 07	0.100	108
16M021609 - 08	< 0.030	106
16M021609 - 09	< 0.030	105
16M021609 - 10	0.034	109
16M021609 - 11	< 0.030	110
16M021609 - 12	0.138	104
16M021609 - 13	0.119	109
16M021609 - 14	0.116	108
16M021609 - 15	< 0.030	103
QA/QC Method Blank	< 0.004	
QC 0.100 ug Standard	0.103	
QA 0.020 ug Matrix Spike	0.018	
QA 0.020 ug Matrix Spike Duplicate	0.018	
Method Detection Limit (MDL)	0.004	
Practical Quantitation Limit (PQL)	0.030	

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

Robert M. Orheim
Director of Laboratories

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.

SAMPLING DATE:	Feb 16, 2009	REPORT TO:	Caoimhín P. Connell
PROJECT Name/No:	16th Place	COMPANY:	Forensic Applications, Inc.
eMail:	Fiosrach@aol.com	ADDRESS:	185 Bounty Hunters Lane, Bailey, CO 80421
SAMPLER NAME:	Caoimhín P. Connell	PHONE	303-903-7494

ANALYSIS REQUESTED

1. Methamphetamine
2. Use entire contents
3.
4.
5.
6. Not Submitted

LAB Number	Sample Number	SAMPLE MATRIX			ANALYSIS REQUESTS						SAMPLER COMMENTS	LAB COMMENTS	No of Containers
		Wipe	Vacuum	Other	1	2	3	4	5	6			
	16MØ216Ø9-11	X			X	X							1
	16MØ216Ø9-12	X			X	X							1
	16MØ216Ø9-13	X			X	X							1
	16MØ216Ø9-14	X			X	X							1
	16MØ216Ø9-15	X			X	X							1

CHAIN OF CUSTODY RECORD

Wipes Results in: ☐ µg/100cm² ☒ Total µg

Total Number of Containers (verified by laboratory) 5

PRINT NAME	Signature	COMPANY	DATE	TIME	Turnaround Time
Caoimhín P. Connell		FACTs, Inc.	~~02/16/09~~	2:15p	☐ 24 Hours (2X)
MIA SAZON		ACI	2/17/09 2/19/09	1400	☐ 2 Days (1.75X)
					☐ 3 Days (1.5X)
					☒ Routine

Custody Seals:	Yes	No
Container:	Intact	Broken
Temperature:	Ambient	Cooled
Inspected By:	MIA SAZON	
Lab File No.	09111-10	

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:	Feb 16, 2009	REPORT TO:	Caoimhín P. Connell	1	Methamphetamine
PROJECT Name/No:	16th Place	COMPANY:	Forensic Applications, Inc.	2	Use entire contents
eMail:	Fiosrach@aol.com	ADDRESS:	185 Bounty Hunters Lane, Bailey, CO 80421	3	
SAMPLER NAME:	Caoimhín P. Connell	PHONE	303-903-7494	4	
				5	
				6	Not Submitted

LAB Number	Sample Number	SAMPLE MATRIX			ANALYSIS REQUESTS						SAMPLER COMMENTS	LAB COMMENTS	No of Containers
		Wipe	Vacuum	Other	1	2	3	4	5	6			
	16MØ216Ø9-Ø1	X			X	X							1
	16MØ216Ø9-Ø2	X			X	X							1
	16MØ216Ø9-Ø3	X			X	X							1
	16MØ216Ø9-Ø4	X			X	X							1
	16MØ216Ø9-Ø5	X			X	X							1
	16MØ216Ø9-Ø6	X			X	X							1
	16MØ216Ø9-Ø7	X			X	X							1
	16MØ216Ø9-Ø8	X			X	X							1
	16MØ216Ø9-Ø9	X			X	X							1
	16MØ216Ø9-1Ø	X			X	X							1

CHAIN OF CUSTODY RECORD — **Wipes Results in:** ☐ µg/100cm² ☒ Total µg — **Total Number of Containers** (verified by laboratory): 10

PRINT NAME	Signature	COMPANY	DATE	TIME	Turnaround Time
Caoimhín P. Connell	[signature]	FACTs, Inc.	~~02/16/09~~ 2/17/09	2:15p	☐ 24 Hours (2X)
MIA SAZON	[signature]	ACI	2/20/09	1400	☐ 2 Days (1.75X)
					☐ 3 Days (1.5X)
					☒ Routine

Custody Seals:	Yes	No
Container:	Intact	Broken
Temperature:	Ambient	Cooled
Inspected By:	MIA SAZON	
Lab File No.	0911-10	

Appendix C

Analytical Methods

DATACHEM LABORATORIES, INC.

STANDARD OPERATING PROCEDURE APPROVAL SHEET

SOP TITLE: Analysis of Methamphetamine by GC/MS Using Solid Phase Extraction (SPE)

DOCUMENT CONTROL NUMBER: IH-AN-METH Revision 1

EFFECTIVE DATE: 10/15/04

APPROVALS:

MANAGER _____ Date _____

QA MANAGER _____ Date _____

LAB DIRECTOR _____ Date _____

STANDARD OPERATING PROCEDURE

ANALYSIS OF METHAMPHETAMINE IN WIPES BY GC/MS USING SOLID PHASE EXTRACTION (SPE)

1.0 SCOPE AND APPLICATION

1.1 This method was developed to determine the amount of methamphetamine present on cotton gauze wipes (air filters and various other matrixes have also been extracted).

1.2 The practical quantitation limit (PQL) for each individual compound is approximately 0.05 µg/sample.

1.3 The method is based on the solid phase extraction (SPE) of the drug after its acid desorption from the media, the derivatization, and the analysis of the derivative by GC/MS.

2.0 METHOD SUMMARY

This method is used to analyze and quantify methamphetamine (and other related drugs) in wipes. Additional drugs that are analyzed using this method are: amphetamine, phenylpropanolamine, ephedrine and pseudoephedrine. Matrixes, such as air filters, clothing and bulk samples, have also been submitted for analysis, on a semi-quantitative or qualitative basis.

The sample is spiked with an internal standard solution and then desorbed in diluted sulfuric acid. An aliquot of the acid desorbate is processed using solid phase extraction (SPE). The analytes recovered from the SPE column are concentrated and dried using N_2 and a water bath (~ 37 ºC). Once dried, they are reconstituted in a small amount of acetonitrile and the two derivatizing agents are added: MSTFA (N-Methyl-N-(trimethylsilyl)trifluoroacetamide) and MBHFBA (N-methyl-bis(heptafluorobutyramide)). The derivatization occurs mostly on-column. The analysis is then performed by GC/MS using scan mode. The data is processed with EnviroQuant software.

Using an internal standard prior to sample processing removes the need for using sample and standard dilutions in calculations. All standards and samples are calculated as ug/sample based on the ratio of methamphetamine to internal standard (Methamphetamine-d14).

3.0 SAFETY

3.1 Samples must be treated as though they are hazardous. Avoid breathing vapors. Avoid skin contact. Work should be performed in an adequate hood. Analysts must wear proper body and hand protection to prevent adsorption of even small amounts of amines through the skin (lab coat and latex gloves) as well as for protection from other toxic agents. Clandestine drug labs (from where some of these samples may be suspected to originate) may produce unknown and seriously toxic by-products.

3.2 Derivatizing agent MSTFA is highly flammable and corrosive liquid and vapor. May cause flash fire. Static electricity may accumulate and ignite vapors. Reacts violently with water. Contact with water or moist air may liberate hydrogen fluoride gas which in contact with metal can generate flammable/explosive hydrogen gas. While the MSDS is

unavailable for MBHFBA, it is also considered hazardous. Use extreme caution in the handling of both compounds.

3.3 Refer to: DCL SOP LAB-005, "General Laboratory Safety and Chemical Hygiene" and the Safety Manual and Chemical Hygiene Plan of DataChem Laboratories (DCL).

4.0 SAMPLE COLLECTION, PRESERVATION, CONTAINERS, HANDLING, AND STORAGE.

4.1 Wipes: the recommended media for the sampling is cotton gauze, 3" x 3" 12-ply, in sterile packages.

4.1.1 Samples are collected following the procedures established by local regulations in effect at the sampling site. If there are not specific regulations for a particular location, the Colorado and Washington State guidelines are recommended.

4.1.2 Each sample has to be stored in an adequate container and capped tightly. The recommended containers are 50-mL disposable centrifuge tubes or 40-mL VOA glass vials. No plastic bags of any kind may be used if quantitative results are needed.

4.1.3 Refrigeration is required at $4^{o}C \pm 2^{o}C$. All samples must be analyzed within 28 days of collection.

5.0 INTERFERENCES AND POTENTIAL PROBLEMS

5.1 Extremely alkaline samples may neutralize the diluted sulfuric acid solution during the initial desorbing phase. In this situation, add a few drops of concentrated sulfuric acid to counteract the effect.

5.2 Samples containing large amounts of fine solid particles (i.e. dust, washed paint) are allowed to settle after desorbing by letting them stand for 15-30 minutes or by centrifugation if necessary. This precaution is taken to avoid clogging the SPE columns.

5.3 The stability of the derivatized drugs is estimated to be 3-4 days, even under refrigeration. To avoid alterations in the expected composition of the derivative is recommended to analyze the samples as soon as the preparation process is finished.

6.0 INSTRUMENTATION AND EQUIPMENT/APPARATUS

6.1 Microsyringes: as needed.

6.2 Volumetric flasks: as needed.

6.3 Volumetric dispensers: 50 mL and 5 mL.

6.4 Disposable centrifuge tubes: 50-mL.

6.5 pH paper.

6.6 Rotating mixer (10-30 rpm).

6.7 J.T. Baker SPE-21 vacuum manifold or similar one.

6.8 Liquid effluents trap system.

6.9 Solid Phase Extraction: Oasis® MCX cartridges, 3 cc/60 mg, 30 µm (Waters Corp. #186000254) or equivalent.

6.10 Disposable tips pipettor, 1-10 mL.

6.11 Glass test tubes with caps, 8 mL (fit in the vacuum manifold rack).

6.12 Disposable tips pipettor, 50-1000 µL.

6.13 Nitrogen blow down system with water bath.

6.14 Vortex mixer.

6.15 Low volume GC vials and caps.

6.16 Pasteur pipettes.

6.17 Gas Chromatograph/Mass Spectrometer System: Hewlett Packard 5890/5972 or equivalent.

6.18 GC Column: DB5MS, 30-m, 0.32-mm internal diameter, 0.5-µm film thickness or equivalent.

6.19 Data system: Enviroquant software or equivalent.

7.0 STANDARD SOLUTIONS, SOLVENTS AND REAGENTS

7.1 Standard solutions.

Methamphetamine is a controlled substance subject to handling in compliance with DEA regulations.

7.1.1 D-Methamphetamine.HCl (MW=185.70), Altech Laboratories, or equivalent.

7.1.1.1 Stock solution : approximately 1000 µg/mL in methanol. Correct the weight of the salt to weight of methamphetamine (MW=149.24). Protect from light.

7.1.1.2 Intermediate standard IS1: approximately 200 µg/mL in methanol.

7.1.2 Methamphetamine-d14 (deuterated), Cerilliant, cat. # M-093, or equivalent.

7.1.2.1 Stock solution : 1-mL ampoule, 1000 µg/mL.

7.1.2.2 Intermediate standard: 100 µg/mL.

7.2 Solvents.

7.2.1 Isopropyl alcohol (IPA), High Purity, Burdick and Jackson, or equivalent.

7.2.2 Methanol (MeOH), High Purity, Burdick and Jackson, or equivalent.

7.2.3 Methylene chloride ($MeCL_2$), High Purity, Burdick and Jackson, or equivalent.

7.2.4 Acetonitrile (ACN), High Purity, Burdick and Jackson, or equivalent.

7.3 Derivatizing agents.

7.3.1 N-Methyl-N-(trimethylsilyl)trifluoroacetamide (MSTFA), Campbell Science Corporation, Product # DR100 or equivalent.

7.3.2 N-methyl-bis(heptafluorobutyramide (MBHFBA), Campbell Science Corporation, Product # DR132 or equivalent.

7.4 Others.

7.4.1 Crystal violet [*548-62-9*], ≥95%, A.C.S. grade.

7.4.2 Sulfuric acid (H_2SO_4), A.R. grade.

Prepare 0.2 N aqueous solution, and store it in a bottle equipped with a 50-mL dispenser, set to dispense 30 mL at a time.

7.4.3 Hydrochloric acid (HCl), A.R. grade.

Prepare 0.1 N aqueous solution.
Prepare 0.3 N methanolic solution, containing aproximately 0.5 mg/mL of Crystal violet, and store it in an amber bottle.

7.4.4 Ammonium Hydroxide (NH_4OH), A.R. grade.

7.4.5 Deionized water, ASTM Type II water or equivalent.

7.5 Gases.

7.5.1 GC/MS carrier gas: high purity helium.

7.5.2 Sample drying gas: purified nitrogen.

8.0 PROCEDURE

8.1 Sample Preparation

8.1.1 Uncap the 50-mL propylene tube or 40 mL-VOA vial containing the sample. If the sample came in another type of container, transfer it to one of the mentioned above, using clean tweezers.

8.1.2. Spike exactly 50 µL of internal standard solution (D14-methamphetamine).

8.1.3 Add 30 mL of 0.2 N sulfuric acid using a dispenser. If the sample came in another type of container, add the 30 mL to the original container, rinse and then quantitatively transfer the solution into the 50-mL tube.

8.1.4 If there is any indication or probability that the any of the samples may be highly alkaline (wipes of concrete surfaces or very soiled samples), check the pH with a strip of pH paper and verify that it is ≤ 4. If that is not the case, add concentrated sulfuric acid dropwise using a Pasteur pipette, just until the pH ≤ 4 is reached.

8.1.5 Mix the samples using a rotatory tumbler for 1 to 1.5 hours.

8.1.6 A commercially available manifold is used for the solid phase extraction. Connect the manifold unit to the effluents trap, and the trap to the vacuum source. Remove the tube rack from the manifold.

8.1.7 Rinse each position of the manifold with methanol. Place one SPE column in each position to be used. Plug the empty positions.

8.1.8 Condition the SPE columns by adding 3 mL of methanol followed by 3 mL of deionized water.

8.1.9 Using a large disposable tip pipettor, take a 5-mL aliquot of each sample and carefully load each column. The vacuum flow should be set approximately at 1-2 mL/min.

8.1.10 After all the columns have been emptied, proceed with the washing steps.

8.1.11 Wash with 2 mL of 0.1 N hydrochloric acid.

8.1.12 Wash twice with 1 mL portions of methanol. Wait until the first addition is gone before adding the second to ensure the flushing of the aqueous acid.

8.1.13 Discard effluents.

8.1.14 Increase the vacuum to ~25 PSI. Leave it for 5-7 minutes to dry the samples.

8.1.15 Prepare collection tubes. Place one 8-mL test tube for each sample, in the rack . Using the small volume pipettor, add 100 µL of 0.3 N hydrochloric acid (in methanol) containing the Crystal Violet at approximately 0.5 mg/mL, to each tube.

8.1.16 Position the rack with the collection tubes under the columns.

8.1.17 Prepare the elution mixture of NH_4OH:IPA:$MeCl_2$ in a 2:20:80 proportion. The mixture must be prepared freshly just before use.

8.1.18 Elute the samples by adding 3 mL of the mixture to each column. Adjust the vacuum to 1 mL/min or less.

8.1.19 In the hood, place the tubes under a gentle N_2 flow inmersed in a water bath at 35-40 ºC. Evaporate to dryness. When the samples are dry, the intense purple colored solution becomes a pale violet tint against white amonium salts present, or in the absence of salts in the bottom of the tubes, purple concentric rings ending in the very center of the tube. Remove the tubes and cap within 1-2 minutes after the drying point.

8.1.20 Add 100 µL of acetonitrile to each tube using a microsyringe. Re-cap each tube immediately.

8.1.21 Add 25 µL of MSTFA to each tube using a microsyringe. Re-cap each tube immediately.

8.1.22 Add 25 µL of MBHFBA to each tube using a microsyringe. Re-cap each tube immediately.

8.1.23 Mix each tube in the Vortex mixer for a few seconds.

8.1.24 Using disposable pipettes transfer the content of each tube to low volume vial and cap immediately.

8.1.25 Store at 4 ºC ± 2 ºC if they are not going to be analyzed immediately. The analysis must be completed within 2-3 days.

8.2. Working standards preparation and continuing calibration standards (Additional QC Samples): these are prepared with every set of samples.

8.2.1 Add 3 mL of IPA to each one of 3-50 mL polypropylene tubes. Add cotton gauze, 3" x 3" 12-ply, in sterile packages cotton gauze to each polypropylene tubes.

8.2.2 Prepare a fresh 1:10 dilution (IS2) of the methamphetamine intermediate solution (IS1) in a vial (no more than 100 uL).

8.2.3 Spike the methamphetamine solutions, IS1 and IS2, into the 3-50 mL polypropylene tubes containing the 3 mL of IPA, as specified in the table:

Intermediate Standard	Volume (µL)	Working Standard ID	Concentration (µg/sample)
IS2~20 µg/mL	2.5	#1	0.05
IS1~200 µg/mL	10	#2	2
IS1~200 µg/mL	300	#3	60

8.2.4 Process the standards with the rest of the samples, following the steps at 8.1.1.

8.3 Quality Control Samples.

8.3.1 A method blank and duplicate spiked samples must be prepared for every batch of 20 samples. See section 8.2.1 for additional QC samples and 8.4.3 and 8.4.4 for analysis sequence of QC samples.

8.3.2 Three clean wipes, preferably provided by the client or the same kind used for the sampling, should by used as QC samples. If these wipes are not available then use a cotton gauze, 3" x 3" 12-ply, in sterile packages, as default.

8.3.3 Place each wipe in one 50-mL propylene conical tube.

8.3.4 Add 3 mL of IPA to each tube, using the dispenser bottle.

8.3.5 Spike 50 µL of the Methamphetamine Intermediate solution IS1 (200 µg/mL) in two of the wipes, that will be the control sample and duplicate. Do not add any spike to the third tube, that will be the method blank.

8.3.6 Process the QC samples with the rest of the samples, following the steps at 8.1.1.

8.4 Analysis.

8.4.1 GC/MS Conditions.

8.4.1.1 Temperature program: initial temperature of 90 ºC for 2 minutes, heating to final temperature of 310 ºC at a rate of 10 ºC/min and holding at 310 ºC for 6 minutes.

8.4.1.2 Injection: 2 µL in splitless mode, at 255 ºC.

8.4.1.3 Helium flow rate: approximately 1.3 cc/min.

8.4.1.4 Detector transfer line temperature: 275 ºC.

8.4.1.5 MS scanning: 35 to 570 AMU at about 2.4 scans per second.

8.4.2 Initial Internal Standard Calibration

The standard curve for methamphetamine is established by plotting the area ratio response for each standard/internal standard from section 8.2.3 against the standard concentration. The acceptance criterion for the initial calibration curve is a correlation coefficient of 0.995 or higher.

8.4.3 QC analysis

The QC samples are analyzed after the initial calibration. The results for the control sample and duplicate must be inside the control limits to proceed with the analysis of the samples. The method blank must not show a level of methamphetamine above the MDL.

8.4.4 Continuing Calibration Verification (Additional QC Samples)

Calibration must be verified at the beginning, after every ten samples and after the last sample. The result must be within ±15% of the target value. If the verification is outside limits rerun the verification once and then reanalyze all samples after the last compliant verification.

8.4.5 Dilutions.

When the level of the analyte in any of the samples exceeds the highest standard the sample must be diluted. The dilution solvent used is a mixture of ACN: MSTFA :MBHFBA in a ratio of 100:25:25. The maximum dilution will not exceed 1:16, in order to maintain a reliable response from the internal standard. If the sample can not be diluted into the calibration range, contact the project manager for further instructions. Any results reported exceeding the calibration range must be qualified in the report as having less certainty.

9.0 CALCULATIONS

9.1 The characteristic total ion chromatogram and the mass spectra for the methamphetamine and methamphetamine-d14 are shown in Appendix 1.

9.2 The target, confirming and quantifying ions used are:

Compound	Target/Quantifying m/z	Qualifyer1 m/z	Qualifyer2 m/z	Qualifyer3 m/z
Methamphetamine	254	210	118	91
Methamphetamine-d14	261	213	169	128

9.3 The calculations are made using EnviroQuant software. The results are obtained in µg/sample. No calculations are made.

10.0 QUALITY ASSURANCE/QUALITY CONTROL

10.1 Historical control limits for QC samples are 75% to 125%

10.2 RPD limits of ± 20% must be met on QC sample duplicates.

11.0 REPORTING RESULTS

11.1 The results for the samples are reported in units of µg/sample or µg/cm^2.

12.0 REFERENCES

12.1 "Cleanup of Clandestine Methamphetamine Labs Guidance Document," July 2003, Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division, 4300 Cherry Creek Drive South, Denver, Colorado 80246-1530, (303) 692-3320 ext 3320, http://www.cdphe.state.co.us/hm/methlab.pdf (May 10, 2004).

12.2 "Guidelines For Contamination Reduction And Sampling At Illegal Drug Manufacturing Sites," June 1996, Washington State Department of Health, Office of Toxic Substances, P.O.Box 47825, Olympia, WA, 98504-7825, Attn. Lew Kettle, http://www.doh.wa.gov/ehp/ts/CDL/CDLGuidelines.pdf (May 10, 2004).

12.3 John M. Reynolds, Carolina Siso, James B. Perkins, Draft Method for Methamphetamine and Illicit Drugs, Precursors, and Adulterants in Wipes by GC/MS and Solid Phase Extraction, prepared under NIOSH Contract (Unfinished, 2004).

12.4 DataChem Industrial Hygiene Quality Assurance Plan.

12.5 General Calibration Requirements for Organic Industrial Hygiene Samples (IH-QA-009)

Figure 1. Total Ion Chromatogram of a Derivatized Methamphetamine Standard spiked with Methamphetamine-d14 as Internal Standard.

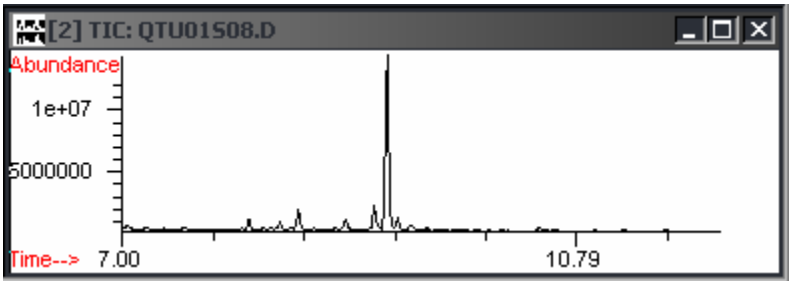


Figure 2. Methamphetamine Derivative Spectra.

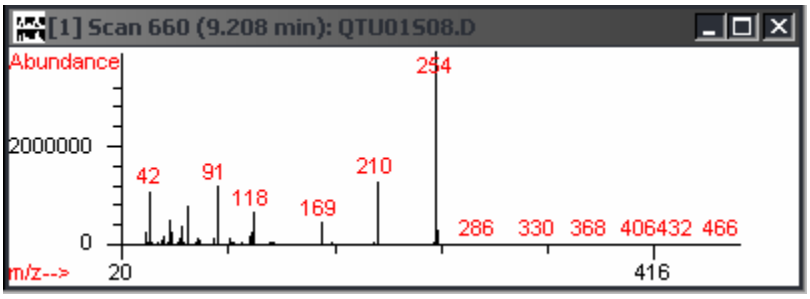
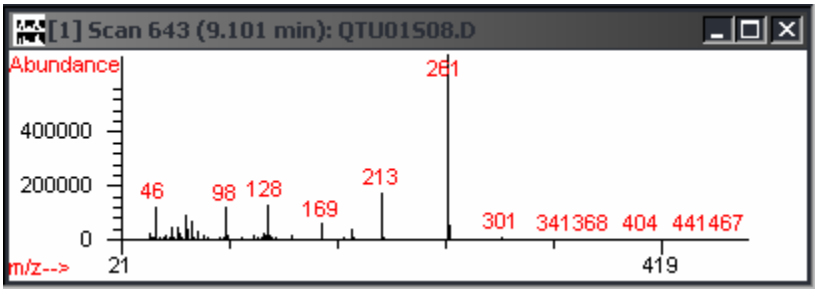


Figure 3. Methamphetamine-d14 Derivative Spectra.



Appendix D

Initial Industrial Hygiene Report

Industrial Hygiene Assessment of an Unoccupied Property Resulting in the Discovery of an Illegal Drug Laboratory at 8105 W 16th Place Lakewood, CO 80214-6052

Prepared for:
Lynn Bartsch
1905 Foothills Drive, South
Golden, CO 80401

Prepared by:

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

January 14, 2009

EXECUTIVE SUMMARY

On Thursday, January 8, 2009, Forensic Applications Consulting Technologies, Inc. (FACTs) was contracted to perform a standard cursory evaluation for the presence of methamphetamine at 8105 W 16th Place, Lakewood, CO 80214-6052 (the subject property).

Pursuant to the Colorado Real Estate methamphetamine disclosure and testing statute as described by CRS §38-35.7-103(2)(a), FACTs collected two standard five-part composite samples for the quantitative determination of the presence of methamphetamine from ten different locations in the subject property. The sampling data quality objectives (DQOs) employed by FACTs were to determine, within normal analytical confidences,[1] the possibility of methamphetamine presence at the subject property. The samples were collected by Mr. Caoimhín P. Connell, who is an Industrial Hygienist, as that term is defined in CRS §24-30-1402.

Based on state of the art sampling and analysis techniques, we conclusively determined the presence of methamphetamine in the residential structure; therefore, based on current statutes and regulations, the property meets the definition of an "illegal drug laboratory" as described below, is has been conclusively demonstrated to be noncompliant with Colorado State regulations and State statutes as described below.

According to current State of Colorado Regulations and Statutes, our verbal report to the prospective buyer on Wednesday, January 14, 2009, served as "Discovery" as that term is found in Colorado Revised Statutes §25-18.5-103 and "Notification" as that term is used in CRS §25-18.5-103 (1)(a).

Based on this finding, after notification, entry into the property is prohibited by statute CRS §25-18.5-104. The prohibition of entry extends to the owner, the seller, the owners representatives, bank representatives, home inspectors, Realtors, and anyone else "…unless the person is trained or certified to handle contaminated property pursuant to board rules or federal law."

Background Information

Structure

The subject property built *circa* 1953, consisted of a single family dwelling approximating 1,360 square feet of interior space, with a detached tool shed of approximately 40 square feet. At the time of our visit, the structure was unoccupied, devoid of all chattels and was in a generally good state of repair.

[1] Colorado Department Of Public Health And Environment, State Board Of Health, Regulations Pertaining to the Cleanup of Methamphetamine Laboratories, 6 CCR 1014-3, used merely as a sampling reference.

ASSESSMENT PROTOCOLS

Sampling Protocol

The Industrial Hygiene assessment was performed pursuant to the Colorado's Real Estate methamphetamine disclosure and testing statute as described by CRS §38-35.7-103(2)(a).

According to Colorado revised statutes,[2] the seller of a property shall disclose in writing to the buyer whether the seller knows that the property was previously used as a methamphetamine laboratory.

During our cursory assessment, the hypothesis was made that the subject property was devoid of detectable concentrations of methamphetamine at a specified limit of detection and data would be collected to support the hypothesis. As such, the data quality objectives were not designed to quantify or characterize the *extent* or degree of contamination, but rather to support the statement: "Methamphetamine is <u>not</u> present in the property above specified levels."

Our DQOs were such that we selected a total sampling area that would result in a reportable quantity limit of 0.09 µg/100cm2. That is, unless the concentration of the methamphetamine in the sample submittal exceeded 0.09 µg/100cm2, the laboratory would report the concentration as "below detection limit." The value of 0.09 µg/100cm2 was selected since according to the State of Colorado Regulations, the minimum permissible concentration of methamphetamine allowed as determined during compliance sampling is 0.1 µg/100cm2.

Our testing produced results that failed to support the hypothesis, and we therefore accept the null hypothesis; *viz.* the subject property conclusively contains methamphetamine. Our sampling indicates that if the samples were collected as part of a final clearance sampling protocol, the concentrations would have been approximately twice the minimum permissible concentration of methamphetamine allowed as determined during compliance sampling.

Our data also suggest that there is a finite probability that the methamphetamine concentrations in the property are such that upon completion of the mandatory Preliminary Assessment, conditions at the property may permit the Industrial Hygienist to issue a Decision Statement directly from the mandatory Preliminary Assessment.

Sample Collection

Using standard industrial hygiene methods, we collected two 5-part composite samples from the primary structure. The samples were submitted to Analytical Chemistry, Inc. for quantitative analysis using gas chromatography coupled with mass spectrometry. Analytical Chemistry Inc. is one of the laboratories listed in Colorado's regulations as being proficient in methamphetamine analysis.

[2] CRS 38-35.7-103(3)(a)

Wipe Samples

The wipe sample media was individually wrapped commercially available *Johnson & Johnson*™ gauze pads. Each gauze material was assigned a lot number for quality assurance and quality control (QA/QC) purposes and recorded on a log of results. Each pad was moistened with reagent grade methyl alcohol. Each batch of alcohol was assigned a lot number for QA/QC purposes and recorded on a log of results.
The sampling media were prepared off-site in small batches in a clean environment. The sample media were inserted into individually identified polyethylene centrifuge tubes with screw caps and assigned a unique sample identifier.

Field Blanks

Our data quality objectives did not include a field blank, and none were submitted. The history of the FACTs sampling media has demonstrated a media and solvent contamination level below the analytical detection limit for the method (for n=63).

Field Duplicates

For the purposes of the data quality objectives associated with this cursory evaluation, no duplicates were required, and none were collected.

Sample Results

In the table below, we have presented the result of the sampling in the context of the DQOs.

Sample ID	Sample Location	Methamphetamine Concentration µg/100cm2
BM010809-1A	Kitchen top of refrigerator	**0.23**
BM010809-1B	Living room ceiling fan	
BM010809-1C	Dining room ceiling fan	
BM010809-1D	Bathroom top of lighting fixture	
BM010809-1E	South Central Bedroom ceiling fan	
BM010809-1	Composite	
BM010809-2A	SW Bedroom ceiling fan	**0.12**
BM010809-2B	SW Bedroom furnace return	
BM010809-2C	NW Bedroom ceiling fan blade	
BM010809-2D	Garage room fireplace shelf	
BM010809-2E	Back garage room top of electrical box	
BM010809-2	Composite	

Table 1
Results of Methamphetamine Samples

The submitted composites conclusively contain methamphetamine. If the composite samples had been collected and submitted as part of final verification sampling conducted pursuant to Colorado regulation 6 CCR-1014-3, the results would have indicated that the concentrations were at least twice the statutory clean-up limit permitted by regulation. A copy of the laboratory report is included with this discussion as Appendix A.

PERTINENT REGULATORY STANDARDS

The State of Colorado currently has one methamphetamine regulation and three methamphetamine statutes that are germane to the subject property.

State Statutes

Environmental Statutes

Colorado has one of the country's most comprehensive and scientifically based clandestine drug laboratory regulations. The Colorado regulations become applicable when the owner of a property has received "notification" from a peace officer that chemicals, equipment, or supplies indicative of a "drug laboratory" are located at the property, ***or when a "drug laboratory" is otherwise discovered***,[3] and the owner of the property where the "drug laboratory" is located has received notice.

In turn, "drug laboratory" is defined in Colorado Revised Statutes §25-18.5-101 as the areas where controlled substances 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*. The definitions of an illegal drug lab includes smoking methamphetamine, since smoking is a process, and its mere presence in the context of illegal possession constitutes *storage* and therefore, an "illegal drug lab" as defined by State statutes.

Pursuant to State statute CRS §25-18.5-105(1), an illegal drug laboratory that has not met the cleanup standards set by the State Board of Health must be deemed a public health nuisance, and must either be demolished or remediated.

Property Statutes

Pursuant to CRS §38-35.7-103 (1) a buyer of residential real property has the right to test the property for the purpose of determining whether the property has ever been used as a methamphetamine laboratory.

The fatal flaws of CRS §38-35.7-103, notwithstanding, pursuant to CRS §38-35.7-103 (2)(a):

> If the buyer's test results indicate that the property has been used as a methamphetamine laboratory but has not been remediated to meet the standards established by rules of the state board of health…, the buyer shall promptly give written notice to the seller of the results of the test, and the buyer may terminate the contract.

In this case, the conclusive presence of methamphetamine is a reasonable indicator that the property was used to manufacture methamphetamine. In any event, the manufacturing of methamphetamine, *per se*, is a moot point as described below.

[3] CRS §25-18.5-103

Contrary to common misconception, by virtue of these findings, any second test performed pursuant to CRS §38-35.7-103(2)(b) that fails to confirm the presence of methamphetamine can **not** be used to release the seller from the statutory requirements to perform the required Preliminary Assessment, since the discovery and notification have already occurred pursuant to CRS §25-18.5-103 (1)(a) and Colorado regulations 6 CCR 1014-3. Pursuant to State statutes, any additional testing by another Industrial Hygienist can only be used if the data support these initial findings; the data are not permitted to be used to refute, rebut or counter these findings, and cannot be used to provide the seller with regulatory relief.

Criminal Proceedings – Public Nuisance Statutes

Pursuant to State statute CRS §16-13-303(c)(1), every building or part of a building including the ground upon which it is situated and all fixtures and contents thereof, and every vehicle, and any real property shall be deemed a class 1 public nuisance when used for the unlawful ***storage or possession*** of any controlled substance, or any other drug the possession of which is an offense under the laws of Colorado. Based on CRS §16-13-303(c)(1), the presence of extant methamphetamine in the property is *prima facie* evidence of possession of the same.

Pursuant to State statute §16-13-308)(1)(a), if probable cause for the existence of a Class 1 Public Nuisance is shown to the court by means of a complaint supported by an affidavit, the court shall issue a temporary restraining order to abate and prevent the continuance or recurrence of the nuisance or to secure property subject to forfeiture. Such temporary restraining order shall direct the County Sheriff or a peace officer to seize and, where applicable, close the public nuisance and keep the same effectually closed against its use for any purpose until further order of the court.

An alternative declaration of Public Nuisance may be found in statute §16-13-307(4), wherein an action to abate a public nuisance may be brought by the district attorney, or the attorney general with the consent of the district attorney, in the name of the people of the State of Colorado or in the name of any officer, agency, county, or municipality whose duties or functions include or relate to the subject matter of the action.

In this case, jurisdiction for the abatement of the public nuisance lies with the office of the "Governing Body:"

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

FACTs will forward a copy of this report to the Governing Body on Thursday, January 15, 2009.

State Regulations

Pursuant to Colorado regulations 6 CCR 1014-3, [4] following discovery and notification, a comprehensive and detailed "Preliminary Assessment" must be commissioned by the property owner (seller) and performed by an authorized and properly trained Industrial Hygienist who must characterize extant contamination. The content and context of the "Preliminary Assessment" is explicitly delineated by regulation. Any remediation or cleaning of the property must be based on the Industrial Hygienist's Preliminary Assessment, and cannot occur until such assessment has been conducted.

Since discovery and notification had not, to our knowledge, taken place at the time of our visit, FACTs was not performing a "Preliminary Assessment" as that term is defined in State regulation, and this work does not meet the definition of a "Preliminary Assessment" and cannot be used or otherwise substituted for a Preliminary Assessment.

Furthermore, no retesting of the property can challenge these data and provide regulatory relief unless the retesting is performed as part of the Preliminary Assessment, and a Decision Statement is subsequently issued pursuant to state regulations.

Mandatory Contamination Thresholds

The actual methamphetamine *concentrations* found in a sample taken at the subject property, are not germane, are not within our stated data quality objectives, and therefore, are not required to be reported. FACTs has reported the meaningless units in this report as an academic pursuit.

A recurring myth amongst unauthorized consultants fraudulently presenting themselves as Industrial Hygienists in methlab related issues is that if sampling (such as that performed at the subject property) finds methamphetamine, but the concentration is less than 0.5 micrograms per one hundred square centimeters (µg/100cm2) of surface area, then the property is "OK," and not covered by the State regulations.

However, this argument is erroneous and no such provisions are found anywhere in State statutes or State regulation. If an Industrial Hygienist chooses non-mandatory sampling (such as performed at the subject property) during an industrial hygiene evaluation, and those samples result in ANY contamination, even below the value of 0.5 µg/100cm2, then the property must, by state regulation, be declared a methlab.[5] This is due to the fact that cursory sampling does not meet the data quality objectives upon which the State clean-up level of "0.5 µg/100cm2" value is based.

In any event, contrary to erroneous statements frequently made by consultants fraudulently representing themselves as Industrial Hygienists, the mere value of "0.5 µg/100cm2" is not the State of Colorado cleanup level, but rather is the value upon which

[4] Titled: Colorado Department Of Public Health And Environment, State Board Of Health, *Regulations Pertaining to the Cleanup of Methamphetamine Laboratories*.
[5] *Ibid*. Appendix A

the final cleanup level is based and which is described in the mandatory Appendix A of the State regulations. The Colorado clearance level of "0.5 µg/100cm2," frequently misquoted by members of the general public, applies exclusively as *prima facie* evidence of decontamination at the end of a project[6] and is that attainment threshold occasionally needed to issue a "decision statement" (final clearance).

Contrary to popular misconception, there is no *de minimis* concentration during a Preliminary Assessment below which a property could be declared "not a meth lab" or "not of regulatory concern" since virtually any concentration of meth present in a sample at the property 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.*[7]

In a recent unofficial opinion issued by the State of Colorado Department of Public Health and the Environment,[8] the state opined that even when the cursory concentrations are far below state mandated limits:

> *"Performing a PA* [Preliminary Assessment] *and clearance sampling is the only way to meet the requirements of the Reg, get the liability shield, and provide protection for future Real Estate transactions."*

Although our initial testing was conducted pursuant to CRS §38-35.7-103, based on our observations, our role and activities jointly and contemporaneously fell under CRS §25-18.5-103, and the drug laboratory was "otherwise" discovered.

Statement of Uncertainty

For all 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:

[6] Colorado Department Of Public Health And Environment, State Board Of Health, *Regulations Pertaining to the Cleanup of Methamphetamine Laboratories*, 6 CCR 1014-3.

[7] *Ibid*.

[8] Email transmission from Craig Sanders to FACTs, January 31, 2008, quoting Coleen Bresnahan, CDPHE, regarding a property at 32548 Kinsey Lane Conifer, Colorado.

Figure 1
Confidence intervals of Reported Values

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, where the reported value is less than the decision threshold, there is a probability the true value is greater than the decision threshold (C).

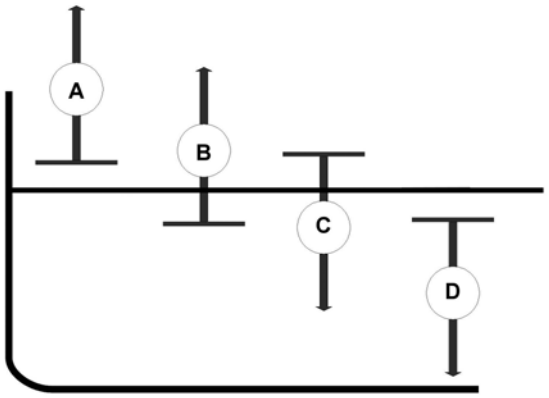


Figure 2
Uncertainty in Reported Values

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, such as this analysis method, the degree of analytical uncertainty is known and published, and is generally small. However, for field methamphetamine sampling, the statistical uncertainty is generally very large. When we analyze field data from fully characterized properties, we see that the variation of concentrations from the building as an whole usually exhibits a lognormal distribution. As such, geometric standard deviations can be as large as 3.0.

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. In this case, the LCL is conclusively greater than the minimum decision threshold, and the UCL may be greater than the maximum decision threshold.

We did not see anything in this property that would indicate the data distribution would be any different, therefore, there is a finite probability that at least one location in the property has methamphetamine concentrations significantly greater than the maximum permissible level allowed by State regulations. Our sampling merely conclusively confirms noncompliant conditions exist at the residence at the time of sampling.

FOLLOW-UP ACTIONS

Colorado State statutes do not prohibit a prospective buyer from purchasing a property identified as an illegal drug lab. However, those same statutes require any such purchaser of the property to bring the property into compliance within 90 days.

From this point forward, there is only one of two legal paths the property owner can take:

1) A Preliminary Assessment must be performed.
2) The property must be demolished.

CONCLUSIONS

Based on our objective sample results collected during our January 8, 2009 visit, the subject property contains methamphetamine.

Based on the presence of methamphetamine, the property meets the definition of an illegal drug lab and Class 1 public nuisance as defined in State statutes.

Pursuant to State statues, the illegal drug lab has been "otherwise discovered." Pursuant to statute, a Preliminary Assessment must be performed pursuant to regulation by an authorized Industrial Hygienist, and a "decision statement" obtained, or the property must be demolished. Pursuant to CRS §38-35.7-103(2)(a), the buyer must promptly give written notice to the seller of the results of the testing, and the buyer may terminate the contract. We recommend that the registered owners (the buyer) notify the seller in writing, by certified mail, of the results of the methamphetamine tests performed at the property.

Prepared by:

Caoimhín P. Connell
Forensic Industrial Hygienist

Appendix A
Laboratory Report

ANALYTICAL CHEMISTRY INC.

Established in 1979

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

Website: www.acilabs.com

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

Lab Reference:	09102-09
Date Received:	January 9, 2009
Date Completed:	January 13, 2009

January 13, 2009

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

CLIENT REF: Bartsch

SAMPLES: wipes/2

ANALYSIS: Methamphetamine by Gas Chromatography-Mass Spectrometry.

RESULTS: in total micrograms (ug)

Sample	***Methamphetamine, ug***	***% Surrogate Recovery***
BM010809 - 01	0.073	93
BM010809 - 02	0.039	98
QA/QC Method Blank	< 0.004	
QC 0.100 ug Standard	0.106	
QA 0.020 ug Matrix Spike	0.018	
QA 0.020 ug Matrix Spike Duplicate	0.021	
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.

SAMPLING DATE:	Jan 8,2009	REPORT TO:	Caoimhín P. Connell	ANALYSIS REQUESTED	
PROJECT Name/No:	Bartsch	COMPANY:	Forensic Applications, Inc.	1	Methamphetamine
eMail:	Fiosrach@aol.com	ADDRESS:	185 Bounty Hunters Lane, Bailey, CO 80421	2	Use entire contents
SAMPLER NAME:	Caoimhín P. Connell	PHONE	303-903-7494	3	
				4	
				5	
				6	Not Submitted

LAB Number	Sample Number	SAMPLE MATRIX			ANALYSIS REQUESTS						SAMPLER COMMENTS	LAB COMMENTS	No of Containers
		Wipe	Vacuum	Other	1	2	3	4	5	6			
B01	BM010809-01	X			X	X							1
B02	BM010809-02	X			X	X							1
					X								
					X								
					X								
					X								
					X								
					X								
					X								
					X								
					X								

CHAIN OF CUSTODY RECORD | **Wipes Results in:** ☐ µg/100cm² ☒ Total µg | **Total Number of Containers** (verified by laboratory): 2

PRINT NAME	Signature	COMPANY	DATE	TIME	Turnaround Time
Caoimhín P. Connell	[signature]	FACTs, Inc.	01/08/09		☐ 24 Hours (2X)
RM Orheim	[signature]	ACI	1/9/09	1810	☐ 2 Days (1.75X)
					☐ 3 Day (1.5X)
					X Routine

Custody Seals:	Yes	No
Container:	Intact	Broken
Temperature:	Ambient	Cooled
Inspected By:	[signature]	
Lab File No.	09102-09	

$70

Appendix B
Consultant's SOQ

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:	**8105**	**Form # ML15**
Date: January 14, 2009		
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, 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 E

Compact Digital Disc (CD)