LHD Sampling Protocol for Illegal Drug Lab Residue

Only a Qualified Inspector (QI) can certify that an illegal drug lab property has been properly sample tested and certified and thus any property for which an Indiana State Police Clandestine Laboratory Occurrence Report (OR) exists must ultimately be cleared by a QI. A LHD’s property testing is only for determining the presence of illegal drug lab chemical residue(s).

When might a LHD take a wipe sample to determine the presence of illegal drug lab chemical residue(s)?

- there is a strong suspicion that manufacture occurred but no OR exists or
- there is concern that a QI failed to properly test or decontaminate

ISDH’s lab will analyze samples for the presence of illegal drug lab chemical residues at no charge to the LHD. In addition, the lab will provide the LHD with the materials necessary to conduct the sampling. Because the lab cannot ship high resolution gas chromatography grade methanol as it is considered a hazardous material, a representative of the LHD will need to obtain the supplies from the lab.

**Sampling Supplies**

In the event traveling to Indianapolis is not possible, the following materials\(^1\) are needed to properly sample:

- 3” x 3” 12-ply cotton gauze
- High resolution gas chromatography grade methanol
- Cardstock or a Teflon\(^\circledR\) 10 cm x 10 cm square cutout template (single-use/disposable)
- 40 ml VOC vial with septum closure
- Pair of nitrile gloves for each sample to prevent cross-contamination
- Syringe or dropper that measure ml to wet the 3” x 3” cotton gauze
- Zip lock bags
- Marker, labels and painter’s tape
- Protective storage container
- Camera
- Chain of Custody form (see page 4)

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\(^1\) VWR International is a supplier of laboratory materials and can be contacted at 800.932.5000 or [www.VWR.com](http://www.VWR.com). Environmental Express offers 10 cm x 10 cm templates and can be contacted at 843.881.6560 or [www.envexp.com](http://www.envexp.com).
Sampling Procedure

1. Choose sample locations and label vials with number and area accordingly.
2. Put the label information on the Chain of Custody form.
3. Tape the 10 cm x 10 cm templates at the selected locations.
4. Take photographs.
5. Don a clean set of nitrile gloves for each sample taken to prevent cross-contamination.
6. Wet a piece of cotton sampling gauze with 3 – 5 ml of methanol using the syringe or dropper. Squeeze out excess methanol.
7. Wipe the template area (100 cm²) using either the concentric wiping technique\(^2\) for smooth and non-porous surfaces or the side-to-side wiping technique\(^3\) for rough, porous or soiled surfaces.
8. Insert the gauze into the sample container (40 ml vial).
9. Secure the container’s cap, place in a Ziploc bag and refrigerate (<6°C) as soon as possible.
10. Prepare at least one trip blank (1:10 ratio) to assure Quality Assurance/Quality Control by wetting a clean piece of gauze and placing it in its own labeled vial.
11. Ship or hand-deliver samples to the

\(^2\) Concentric wiping technique: For smooth and non-porous surfaces
Fold the pre-wetted gauze in half and then fold it in half again. Using firm pressure, wipe the area within the template. Start at one of the inside corners of the template and wipe in concentric squares, progressing toward the center. End with a scooping motion. Without allowing the gauze to touch any other surface, reverse the last fold so that the exposed side of the gauze is facing inward and using a fresh surface of the gauze, wipe the same area in the same manner as above. Roll or fold the gauze and insert into the sample container.

\(^3\) Side-to-side wiping technique: For rough, porous, or soiled surfaces
Fold the pre-wetted gauze in half and then fold in half again. Using firm pressure, wipe the area within the template with at least five overlapping side-to-side horizontal passes beginning at the top and progressing to the bottom in a “Z” pattern. End with a scooping motion. Roll and fold the gauze and insert into the sample container.
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In a typical illegal drug lab related property sampling, a QI follows the requirements of 410 IAC 38-5-6 which includes each room and space and additional tests for the bathroom, kitchen, and HVAC system. If only one sample will be taken, the best location in the property is the forced air HVAC system. To test a furnace, follow the sampling procedures outlined above and

- Remove cover.
- Locate the furnace intake.
- Place the template.
- Wipe using the concentric wiping method.

If the system is not a forced air system, other areas that are most likely to have residual contamination include air ducts, cold air returns, under the hood of the stove (or microwave if present), or next to a bathroom fan.

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