



ATF-LS-QD13 Cigarette Tax Stamp Examinations	Published Online: March 2018
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PRINCIPLE:

To determine, if possible, if a particular cigarette tax stamp is authentic.

There are several manufacturers of cigarette tax stamps including SICPA, headquartered in Lausanne, Switzerland which owns Meyercord in Carol Stream, Illinois. Tax stamp manufactures have proprietary tests to determine the authenticity of their products. Some states such as North Carolina, South Carolina and North Dakota do not have tax stamps.

California and Massachusetts have adhesive based stamps produced by Meyercord in conjunction with SICPA that contain encrypted code detailing the date of manufacture, production machine and wholesaler. Readers for these stamps can be purchased which will enable a user to determine their authenticity. The readers needed to download the encrypted information are only available to the state authorities.

The tax stamps manufactured by Meyercord have both overt and covert security features that can be examined using tests proscribed by the company. These features vary by state and both design and security features can change frequently. Exemplars should be obtained from the tax stamp manufacturer along with a list of security features prior to analysis if possible.

Other tests may be performed when deemed necessary by the examiner. These include, but are not limited to, Scanning Electron Microscopy (SEM), Scanning Electron Microscopy Energy Dispersive Spectrometry (SEM-EDS) and Microspectrophotometry.

SPECIAL HANDING:

1. Evidence containing body fluids that is received in the Document Section should be dried under a hood and then repackaged in a paper box or envelope. Items should be handled in order to prevent examiner exposure and preserve DNA, if requested by the submitter. Contents should be documented on the front of the packaging.
2. When handling a contaminated document the examiner must have on a lab coat and rubber gloves. The evidence should be opened and examined only under a biohazard safety hood. After examination the document should be heat sealed. The work area should be disinfected and the lab coat placed in a biohazard bag and sent to the laundry. The gloves must be placed in a properly labeled biohazard disposal after the examination is concluded.

3. Evidence submitted requesting a latent print examination should be placed in a plastic or mylar sheet protector covering the evidence. In this case, item and examiner identifying marks should be placed on the protective sheet.

SPECIMEN(S):

A single sheet, or roll of cigarette tax stamp(s)

SUPPLIES REQUIRED:

Paper, pen

APPARATUS REQUIRED:

The following apparatus may be required depending on the stamp and examiner determined tests: Stereoscopic microscope; hand magnifier; transmitted light box; various light sources; colored filters; photocopier; Meyercord Tagant reader, VSC (Video Spectral Comparator), or other instrumentation capable of emitting similar wavelengths, and UV instrumentation capable of emitting wavelengths of 254nm and 365nm; Meyercord chemical reagent ; stereomicroscope; ruler or caliper; a printing process identification manual

CALIBRATION REQUIREMENTS:

Microscope maintained in house. No special calibration beyond routine maintenance is required. Examine a test sheet on the VSC prior to examining any casework. Test sheet is utilized to determine proper functioning of machine. If not, then a technician is called to check the equipment. Casework is suspended on the equipment until repairs are made.

PROCEDURES:

The following may be performed. For additional examinations, please see ATF-LS-TE14.

1. If possible, obtain reference stamp(s) for the state with the same characteristics.
2. If more than one stamp is submitted, such as a carton of cigarettes, examine all the stamps for the presence of the security design under longwave UV light.

3. If the stamps all exhibit the same characteristics (watermark, color, etc), sample one stamp randomly and note which stamp was sampled. If the stamps have different characteristics, the examiner must determine which stamps to sample and provide justification.
4. Note basic physical characteristics such as serial number, colors, size, and printing processes used.
5. Perform non-destructive tests available for the particular state such as variable image, print process, fluorescence under short wave, and Tagant.
6. If necessary, remove the tax stamp from the pack and perform the chemical reagent test.
7. The stamp may be further examined using SEM, SEM-EDS, microspectrophometry or other techniques as determined by the examiner.
8. The examiner will determine if further verification by the manufacturer is required. Stamps tested with the chemical reagent may be destroyed.

REFERENCES:

ATF-LS-TE14 The Examination of General Unknowns

The tests proscribed by Meyercord are proprietary and law enforcement sensitive. They are not and cannot be published.