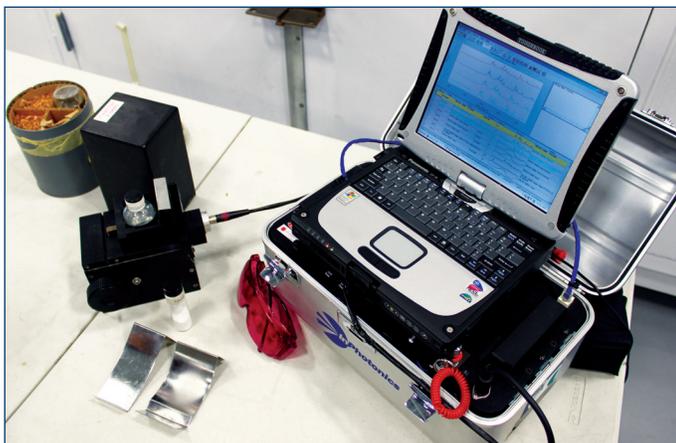




FACT SHEET

RECOVERED CHEMICAL MATERIEL DIRECTORATE

RAMAN SPECTROMETER



The Raman Spectrometer compares the unique chemical signature it produces with its laser to its computer database, allowing operators to identify the contents.

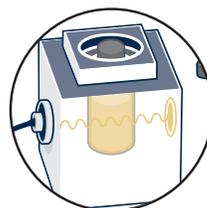
The Raman Spectrometer identifies the contents of Chemical Agent Identification Sets (CAIS), glass vials containing various agents and industrial chemicals once used to train soldiers.

The Raman Spectrometer rapidly obtains detailed information about suspect chemical warfare materiel and distributes that information to the appropriate authorities and responder personnel, greatly reducing the risk to the public, workers and emergency response personnel.



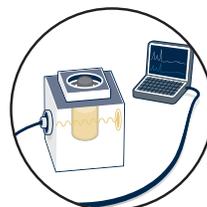
Step 1

Operators place the fiber optic probe against the glass wall of the CAIS item, directing a laser light.



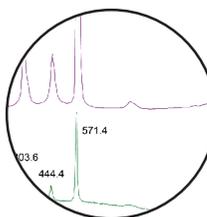
Step 2

As the laser light passes through the glass wall, it produces a unique spectrum signature.



Step 3

Operators then look for distinctive chemical signatures from the spectrum.



Step 4

Operators analyze the information from the spectrometer and identify the contents.

