

2. AGILENT REVIDENT LC/Q-TOF SYSTEM -- REGIONAL FORENSIC SCIENCE CENTER (RFSC)

FUNDING -- KDOT FUNDING

(Request sent to 254 vendors)

RFP #25-0022 Contract

	Agilent Technologies, Inc.
Agilent Revident LC/Q-TOF	\$408,412.66
	AB SCIEX LLC
SCIEX X500R QTOF	\$402,153.38
	Shimadzu Scientific Instruments
Shimadzu LCMS-9050 QToF	\$514,449.12
	Waters Technologies Corporation dba Waters Corporation
Waters Xevo G3 QToF	\$412,928.48

On the recommendation of Britt Rosencutter, on behalf of Regional Forensic Science Center (RFSC), Tim Myers moved to **accept the proposal from Agilent Technologies, Inc. in the amount of \$408,412.66.** Phillip Davolt seconded the motion. The motion passed unanimously.

A committee comprised of Shelly Steadman, Tyson Baird, and Marina Divine - Regional Forensic Science Center and Britt Rosencutter - Purchasing reviewed and evaluated the proposals based on criteria set forth in the RFP. After proposal reviews, all vendors gave a presentation to the committee and Agilent Technologies, Inc. was chosen.

The Regional Forensic Science Center (RFSC) performs both antemortem and postmortem toxicology testing. Antemortem testing is performed for law enforcement cases involving driving under the influence of alcohol or drugs and other drug-facilitated crimes. Postmortem testing assists coroners in the determination of the role of drugs and toxins in cause and manner of death.

Trends in the recreational drug market are creating substantial challenges for forensic toxicology labs. The rapidly evolving nature of the drug market and the increasing potency of emerging drugs. The RFSC currently faces some limitations with existing instrumentation since novel drugs tend to cycle quickly and it is not feasible to continually update the laboratory's analytical methods to encompass all of these drugs within the laboratory's scope of testing.

The addition of a liquid chromatograph coupled to a quadrupole time-of-flight mass spectrometer (QTOF) can help overcome these challenges because it excels at untargeted analyses to detect out-of-scope drugs, which enables detection of emerging compounds not captured by current methods. The analytical technique is also sensitive enough to detect low-concentration drugs in smaller sample volumes. This will assist in thorough and timely testing of postmortem samples and broaden the capabilities to detect drugs in impaired drivers, which is the main traffic safety issue that would be addressed under this project.

The estimated costs include laboratory benches required to support the instrument specifications and meet accessibility requirements for each system.

This is a proposal and not a bid. Proposals are based on criteria set forth in the RFP. There are five (5) components to this RFP.

Component	Points
A. System performance, specifications, capability, specification preferences	40
B. Impact to existing infrastructure	10
C. Company support (historical and/or references) and projected ongoing expense	20
D. Training proposal and available peer support	10
E. Cost	20
Total Points	100

Notes:

This project is being funded by a 2024 Kansas Department of Transportation (KDOT) award that was previously approved by the Board of County Commissioners (contract #15-24-000384, clerk #4454-13). As the project schedule and budget is based on the State of Kansas Fiscal Year and the purchasing agreement must be executed by June 30, 2025, expedited consideration would be appreciated.

Questions and Answers

Russell Leeds: The deadline on this is related to the State Fiscal Year and this spending needs to be done before June 30th?

Britt Rosencutter: Correct.

Russell Leeds: Dr. Steadman, would you care to maybe give an example of the types of drugs? This is a lot of language. Just kind of a brief more layman's language description of what this is going to do for Sedgwick County, Law Enforcement, District Attorney, and the citizens.

Tyson Baird: Really what this is going to enable us to do is to detect novel psychoactive substances. These are what you may often hear called designer drugs. These are sometimes compounds like fentanyl, but they're not fentanyl, so our existing methods to detect fentanyl will miss these and therefore we would not be able to detect those to determine cause and manner of death or its role on an impaired driving investigation. The QTOF, one of its big advantages to it, is it is very sensitive. All of these new fentanyl analogs and so forth that are coming out they are present but in very, very low concentrations in biologicals, so they are very difficult to detect with existing instrumentation. This is going to broaden our capabilities to be very sensitive and specific about what we detect to improve our capabilities.

Russell Leeds: Those illicit laboratories modify the structures of these drugs so this machine helps to detect them in spite of those minor changes in molecular structure.

Tyson Baird: That is correct.

Russell Leeds: Roughly do you have any idea of how many cases a year that this machine will be used for? Maybe that's the wrong question. It may not be cases, it maybe samples, which could be thousands I suppose.

Tyson Baird: I would anticipate our goal is to use this to perform the majority of our screening on samples so we could see anywhere from maybe a 1,000 to 1,500 cases per year run on this instrumentation.

Russell Leeds: Cases could have more than one (1) sample?

Tyson Baird: Yes they could.