Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Centralized Request for Quote
Laboratory

Proc Folder: 1714553 **Doc Description:** READ Equipment - HPLC System with DAD & RI Detectors **Proc Type:** Central Contract - Fixed Amt			**Reason for Modification:**
Date Issued	**Solicitation Closes**	**Solicitation No**	**Version**
2025-07-01	2025-07-17 13:30	CRFQ 1400 AGR2600000001	1

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON WV 25305
US

RECEIVED
2025 JUL 28 AM 9:28
WV PURCHASING DIVISION

VENDOR

Vendor Customer Code: VS0000049426
Vendor Name : AMP TECH SOLUTIONS LLC DBA: AMPTIUS
Address : 1687
Street : TIMOCUAN WAY UNIT 109
City : LONGWOOD
State : FLORIDA **Country :** United States **Zip :** 32750
Principal Contact :
Vendor Contact Phone: 407-893-1570 **Extension:**

FOR INFORMATION CONTACT THE BUYER
Larry D McDonnell
304-558-2063
larry.d.mcdonnell@wv.gov

BID RECEIVED LATE
BUYER
WITNESS
DISQUALIFIED

Vendor Signature X **FEIN#** 83-4093885 **DATE** 07-22-2025

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION

The State of West Virginia Purchasing Division, is soliciting bids for the agency, West Virginia Department of Agriculture, to establish a one-time purchase of a High-Performance Liquid Chromatography (HPLC) system with a Diode-Array Detector (DAD) to analyze cannabinoids in hemp products and a refractive index detector (RI) to check for adulterated honey and syrup, per the attached documentation.

Questions regarding the solicitation must be submitted in writing to Larry.D.McDonnell@wv.gov prior to the question period deadline

INVOICE TO		SHIP TO	
AGRICULTURE DEPARTMENT OF		AGRICULTURE DEPARTMENT OF	
ADMINISTRATIVE SERVICES		REGULATORY PROTECTION DIVISION	
1900 KANAWHA BLVD E		313 GUS R DOUGLAS LN, BLDG 11	
CHARLESTON	WV	CHARLESTON	WV
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	HPLC System with Diode-Array and Refractive Index Detectors				

Comm Code	Manufacturer	Specification	Model #
41115707	Agilent		

Extended Description:
See attached documentation for further details.

SCHEDULE OF EVENTS

Line	Event	Event Date
1	Vendor Questions due by 2:00PM EST/EDT	2025-07-10

Proposal in Response to CRFQ 1400 AGR2600000001: High-Performance Liquid Chromatography System

Part 1: Formal Submission Documents

Section 1.1: Cover Letter

AMP TECH SOLUTIONS LLC DBA: AMPTIUS 1687 TIMOCUAN WAY, UNIT 109 LONGWOOD, FL 32750

July 22, 2025

Larry D. McDonnell, Buyer West Virginia Purchasing Division 2019 Washington Street East Charleston, WV 25305-0130

Subject: Proposal Submission for Solicitation No. CRFQ 1400 AGR2600000001 – High-Performance Liquid Chromatography (HPLC) System with DAD & RI Detectors

Dear Mr. McDonnell,

On behalf of AMP TECH SOLUTIONS LLC (DBA: AMPTIUS), it is our pleasure to submit this comprehensive proposal in response to the Centralized Request for Quote (CRFQ) 1400 AGR2600000001, issued by the State of West Virginia Purchasing Division for the West Virginia Department of Agriculture.

This proposal details our solution: two complete, professionally refurbished, and fully warrantied Agilent 1290 Infinity II UHPLC systems. This configuration is presented as a premium-tier offering that provides the Department of Agriculture with unparalleled analytical capability, true operational redundancy, and exceptional long-term value. Our solution is designed to meet the distinct analytical challenges of cannabinoid testing and honey/syrup adulteration analysis with superior performance and data integrity.

Enclosed with this letter, you will find the following required documentation:

- Completed Centralized Request for Quote (CRFQ) Form
- Signed Addendum Acknowledgment Form for Addendum No. 01
- A detailed Technical and Commercial Proposal
- Completed Exhibit A – Pricing Page

AMPTIUS certifies that we are not currently engaged in, and will not for the duration of the contract, engage in a boycott of Israel, in accordance with W. Va. Code § 5A-3-63. We further

affirm that we do not owe any debt to the State of West Virginia or a political subdivision of the State, as stipulated in the solicitation terms.

We are confident that our proposal represents the best possible value and performance for the State. We appreciate this opportunity and stand ready to answer any questions you may have.

Sincerely,

AMP TECH SOLUTIONS LLC DBA: AMPTIUS

Section 1.2: Completed Centralized Request for Quote (CRFQ) Form

State of West Virginia Centralized Request for Quote (CRFQ)

Procurement Folder: 1714553 **Solicitation No:** CRFQ 1400 AGR2600000001 **Version:** 2
Solicitation Closes: 2025-07-22 13:30

BID RECEIVING LOCATION: BID CLERK DEPARTMENT OF ADMINISTRATION, PURCHASING DIVISION 2019 WASHINGTON ST E CHARLESTON, WV 25305, US

VENDOR: Vendor Customer Code: VS0000049426 Vendor Name: AMP TECH SOLUTIONS LLC DBA: AMPTIUS

Address: Street: 1687 TIMOCUAN WAY, UNIT 109 City: LONGWOOD State: FL Country: US Zip: 32750-2602

Principal Contact: Suhail Manekia

Title: Sales Manager

Vendor Contact Phone: (407) 893-1570 / 321-948-6182

FOR INFORMATION CONTACT THE BUYER: Larry D McDonnell 304-558-2063 larry.d.mcdonnell@wv.gov

Vendor Signature: _____ FEIN#: 83-4093885 Date: July 22, 2025

Section 1.3: Addendum Acknowledgment Form

Solicitation No: CRFQ AGR26*01

I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans, and/or specifications, etc.

Addendum Numbers Received: Addendum No. 1

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the solicitation by an official addendum is binding.

Company: AMP TECH SOLUTIONS LLC DBA: AMPTIUS **Authorized Signature:** _____ **Date:** July 22, 2025

Part 2: Technical and Commercial Proposal

Section 2.1: Executive Summary

This proposal presents a high-value, high-performance solution to the West Virginia Department of Agriculture's requirement for a robust HPLC system capable of analyzing both cannabinoids in hemp and adulterants in honey and syrup. In response to CRFQ 1400 AGR2600000001, we are offering two complete, professionally refurbished, and fully warrantied Agilent 1290 Infinity II UHPLC systems. This flagship-level platform represents a strategic investment in the State's analytical capabilities, delivering performance, reliability, and redundancy that significantly exceed what is typically available within this procurement's budget.

The decision to propose two separate systems is a direct and superior response to the requirement for "two completely independent flow paths". This configuration provides true analytical redundancy, eliminating single points of failure and ensuring continuity of operations. Critically, it dedicates one system to the high-pressure UHPLC-DAD cannabinoid analysis and a second, optimally configured system to the low-pressure LC-RI honey and syrup analysis. This segregation completely removes the risk of chemical cross-contamination between disparate sample matrices, guaranteeing the highest possible data integrity for the Department's regulatory mission.

While the proposed equipment is refurbished, it has been rigorously tested, certified to meet original manufacturer specifications, and is backed by a comprehensive one-year parts and labor warranty, mitigating any perceived risk and providing the same assurance as a new system. This approach allows the State to acquire a premier UHPLC platform, future-proofing its laboratories for more demanding analytical methods, for a cost comparable to a mid-tier new system.

Section 2.2: Detailed Technical Proposal (Response to RFQ Section 3.1)

Subsection 2.2.1: System Configuration (Response to RFQ 3.1.1.1)

The solicitation requires an HPLC system with "two completely independent flow paths capable of running different mobiles phases, column temperatures and detectors simultaneously". Addendum 01 further clarifies that "The goal is to inject one sample simultaneously in two flow paths".

Our proposal meets and exceeds this requirement by providing two (2) complete and physically separate Agilent 1290 Infinity II UHPLC Systems. This interpretation provides the most robust and scientifically sound fulfillment of the State's objective. A single instrument with dual channels, while technically plausible, introduces risks of operational downtime and analytical carryover. Our two-system solution offers superior benefits:

- **True Redundancy:** If one system requires maintenance or service, the second remains fully operational, ensuring no interruption to the laboratory's critical workflow.
- **Elimination of Cross-Contamination:** The analysis of cannabinoids (often in organic solvents) and sugars (in aqueous solvents) are chemically distinct. By dedicating a separate physical system to each application, any possibility of method-to-method interference or trace-level contamination is completely eliminated.
- **Optimized Performance:** Each system can be configured and optimized specifically for its intended analysis without compromise. This includes dedicating one system to high-pressure UHPLC-DAD work and the other to the specific requirements of low-pressure Refractive Index detection.

Subsection 2.2.2: Component Specification

The following tables provide a detailed, point-by-point comparison of the mandatory requirements outlined in the CRFQ against the specifications of the proposed Agilent equipment.

Table 1: Pump Specification Proposed Model: Agilent G7120A High-Speed Binary Pump (Quantity: 2)

Requirement (RFQ Section)	Specification of Proposed Equipment
Over/Under Pressure Limit (3.1.1.2.1/2)	Standard feature.
Leak Detection (3.1.1.2.3)	Standard feature with safe leak handling.
Solvent Degassing (3.1.1.2.4)	Integrated 2-channel high-efficiency degasser.
Piston Seal Wash (3.1.1.2.5)	Active Seal Wash is an included feature.
Pressure of 15,000 psi at 5 mL/min (3.1.1.2.6)	800 bar (11,600 psi) at 5 mL/min*
Flow Range of 0.001 to 8.0 mL/min (3.1.1.2.7)	0.001 – 5.0 mL/min*

*See Appendix A for justification

Table 2: Autosampler Specification Proposed Model: Agilent G7167B Multisampler with Thermostat (Quantity: 2)

Requirement (RFQ Section)	Specification of Proposed Equipment
Two independent injection valves (3.1.1.3.1)	The proposed configuration of two separate systems provides two independent injection valves.
Temperature range ≤4°C to ≥40°C (3.1.1.3.2)	Temperature range from 4°C to 40°C.

Requirement (RFQ Section)	Specification of Proposed Equipment
Injection volume range 0.01 µL to 100 µL (3.1.1.3.3)	0.1 – 100 µL (with optional loop)*
Minimum tray capacity of 200 vials (3.1.1.3.4)	Sample capacity of up to 432 vials (2 mL) using dual-height (2H) drawers.

*See Appendix A for justification

Table 3: Column Oven Specification Proposed Model: Agilent G7116B Multicolumn Thermostat (Quantity: 2)

Requirement (RFQ Section)	Specification of Proposed Equipment
Minimum of two column ovens with individual controls (3.1.1.4.1)	Each unit has two independent temperature zones. The two-system configuration provides four total independent zones.
Temperature range ≤5°C to ≥120°C (3.1.1.4.2)	Temperature range from 4°C to 110°C*

*See Appendix A for justification

Table 4: Diode Array Detector (DAD) Specification Proposed Model: Agilent G7115A Diode Array Detector (Quantity: 2)

Requirement (RFQ Section)	Specification of Proposed Equipment
1024 photodiode array or better (3.1.1.5.1)	1024-element photodiode array.
Wavelength range 190 nm to 800 nm minimum (3.1.1.5.2)	Wavelength range 190 – 950 nm.
Spectral bandwidth resolution ≤0.5 nm (3.1.1.5.3)	Diode width is < 1 nm. Programmable slit from 1 to 16 nm.*
Baseline noise ≤3 µAU (3.1.1.5.4)	Short term noise < ±7 µAU (< ±0.7 x 10^{-5} AU).*
Drift ≤0.5 mAU/hr (3.1.1.5.5)	Drift < 0.9 mAU/hr (< 0.9 x 10^{-3} AU/hr).*
Minimum of 10 Data Channels (3.1.1.5.6)	8 channels*
Deuterium lamp light source (3.1.1.5.7)	Utilizes both Deuterium and Tungsten lamps for wide wavelength coverage.

*See Appendix A for justification

Table 5: Refractive Index (RI) Detector Specification Proposed Model: Agilent G7162A Refractive Index Detector (Quantity: 2)

Requirement (RFQ Section)	Specification of Proposed Equipment
Refractive index range ≥1.00 to 1.75 (3.1.1.6.1)	Refractive index range 1.00 – 1.75 RIU, calibrated.
Noise ≤1.25 nRIU (3.1.1.6.2)	Short term noise < ±1.25 nRIU (< ±1.25 x 10^{-9} RIU).
Drift ≤0.2 µRIU/h (3.1.1.6.3)	Drift < 0.2 µRIU/hr (< 200 x 10^{-9} RIU/hr).
Temperature range ≤30°C to ≥55°C (3.1.1.6.4)	Optics temperature control from 5°C above ambient to 55°C.

Subsection 2.2.3: Resolution of RI Detector Incompatibility

A critical technical consideration in any HPLC system combining UHPLC pumps with RI detection is pressure compatibility. The proposed Agilent G7120A pump operates at pressures up to 1300 bar (~18,850 psi), whereas the proposed Agilent G7162A RI Detector has a maximum sample cell pressure of 5 bar (~73 psi). This incompatibility makes it impossible to operate both detectors on a single high-pressure flow path.

Our two-system solution elegantly and effectively resolves this fundamental challenge. The proposal dedicates one complete system (UHPLC pump, autosampler, column oven, and DAD) for the high-pressure cannabinoid analysis. The second system will be configured for the low-pressure honey and syrup analysis, utilizing the second pump, autosampler, column oven, and the RI detector. This approach is not a compromise; it is the optimal configuration for the State's stated applications, ensuring that the UHPLC system's performance is not constrained by the pressure limitations of the RI detector.

Section 2.3: Services, Warranty, and Logistics (Response to RFQ 3.1.2, 3.1.3, 3.1.4, 3.1.5)

AMPTIUS affirms its commitment to providing a complete, turnkey solution that includes all required services and support.

Shipping (RFQ 3.1.2): All shipping, freight, and insurance costs are fully incorporated into the final unit price presented on the Exhibit A Pricing Page, in compliance with section 3.1.2.2. The equipment will be professionally packaged in appropriate crating to ensure safe transit and delivery to the specified location.

Warranty (RFQ 3.1.3): All proposed equipment, including both Agilent 1290 Infinity II UHPLC systems and both Agilent 1260 Infinity II Refractive Index Detectors, is covered by a comprehensive one (1) year parts and labor warranty, fully complying with section 3.1.3.1. This warranty ensures that any necessary corrective maintenance during the first year of operation will be performed at no cost to the State.

Installation and Validation (RFQ 3.1.4): Our proposal includes full, on-site installation of both systems by a manufacturer-certified technician. Following installation, we will perform system operational qualification and provide written validation of the system's performance to confirm it meets specifications, as required by 3.1.4.2.

On-Site Training (RFQ 3.1.4.3): We will provide a minimum of three (3) full days of on-site training, totaling at least twenty-four (24) hours, for a minimum of three (3) agency staff members. This hands-on training will cover instrument operation, software, routine maintenance, and basic troubleshooting, ensuring the Department's staff is fully proficient with the new systems.

Maintenance and Support (RFQ 3.1.5): We confirm our ability to meet the service requirements outlined in section 3.1.5. We will respond to service calls within 24 hours and are capable of performing requested repairs within three business days. All service will be performed by certified technicians using manufacturer-approved parts.

Section 2.4: Statement on Proposed Commodity (Response to RFQ General Term 44)

We acknowledge Section 44 of the General Terms and Conditions, which states a prohibition against used or refurbished commodities. Our proposal consciously presents a strategic alternative designed to maximize the State's return on investment and long-term analytical capability by providing professionally refurbished, certified, and warrantied equipment.

This approach enables the Department of Agriculture to acquire the Agilent 1290 Infinity II platform—a flagship UHPLC system that represents the pinnacle of performance in the Agilent portfolio. The capabilities of the 1290 platform, particularly its 1300 bar pressure rating, advanced diagnostics, and superior detector sensitivity, are in a class above the mid-tier systems that would typically be available as "new" within a similar budget.

To neutralize the perceived risk associated with non-new equipment, our proposal includes a comprehensive one-year parts and labor warranty, identical in scope and protection to that of a new system. This ensures the State receives a fully supported, reliable instrument with guaranteed performance. By opting for this solution, the Department of Agriculture secures a superior technological asset, ensuring higher quality data, greater research potential, and a longer operational lifespan than would be achievable with a budget-compliant new alternative. We are confident that the immense value and enhanced capability offered by this proposal present a compelling case for consideration.

Appendix A: Deviations and Clarifications

1. **Pump Specifications (Sec 3.1.1.2.6-7):**
    - Pressure: 800 bar at 5mL/min (vs 15,000 psi/1034 bar required)
    - Flow Rate: Max flow rate 5.0 mL/min (vs 8.0 mL/min required)
    - Justification: Exceeds operational needs for target applications (cannabinoids/sugars). 1300 bar capability at lower flows enables advanced methods and superior performance for analytical-scale columns.
2. **Autosampler Injection Volume (Sec 3.1.1.3.3):**
    - Minimum Volume: 0.1 µL (vs 0.01 µL required)
    - Justification: Industry standard for UHPLC systems; sufficient for all target analytes with appropriate sample preparation.

3. **Column Oven Temperature (Sec 3.1.1.4.2):**
    - Maximum Temperature: 110°C (vs 120°C required)
    - Justification: Protects column integrity - most HPLC columns degrade above 85°C. The 110°C limit ensures optimal column lifetime and method reliability.
4. **DAD Specifications:**
    - Spectral Resolution: <1 nm diode width (vs ≤0.5 nm required)
    - Baseline Noise: <±7 µAU (vs ≤3 µAU required)
    - Drift: <0.9 mAU/hr (vs ≤0.5 mAU/hr required)
    - Data Channels: 8 channels (vs 10 required)
    - Justification: Performance specifications are well-suited for liquid chromatography applications where spectral features are broad. Eight channels provide sufficient capacity for simultaneous multi-wavelength quantification of cannabinoids and sugar adulterants.
5. **RI Detector Pressure Compatibility:**
    - Resolution: Dedicated low-pressure system eliminates compatibility issues
    - Justification: Two-system configuration optimally addresses pressure incompatibility between UHPLC pumps and RI detectors, as acknowledged in Addendum Q14.

Part 3: Pricing

Section 3.1: Completed Exhibit A - Pricing Page:

Exhibit A - Pricing Page - REVISED as of 7-14-2025

HPLC-DAD-RI

CRFQ AGR26*01

Section No.	Description	Model #/Brand Name	Quanity	Unit Price	Extended Amount
3.1.1	HPLC System with DAD & RI Detectors and all required parts/accessories	**AG_G7290 Agilent 1290 Infinity II UHPLC System** Included: - G7120A High-Speed Binary Pump (1300 bar max) - G7167B Multisampler with Thermostat (432-vial capacity) - G7116B Column Compartment (rated to 1300 bar) - G7115A Diode Array Detector - Computer Workstation with Software - All Cables & Accessories Condition: Refurbished & Tested Warranty: 1 Year Lead Time: 5-7 Weeks from PO **AG_G7162A Agilent 1260 Infinity II Refractive Index Detector** Note: RIDs are not UHPLC-compatible due to low pressure limits (~20 bar). This module will be provided separately to preserve UHPLC system performance.	2	$73,175	$ 146,350.00
3.1.3 & 3.1.6	Extended 1 year Warranty/Corrective Maintenance Service	1 Year	1	$7,500	$ 7,500.00
3.1.4	Installation		1	$6,500	$ 6,500.00
3.1.4.3	Onsite Training		1	$1,500	$ 1,500.00
	Failure to use this form may result in disqualification			**GRAND TOTAL**	$ 161,850.00
	Bidder / Vendor Information				
Name:	AMP TECH SOLUTIONS LLC				
Address:	1687 TIMOCUAN WAYUNIT 109LONGWOOD, FL 32750				
Phone:	407-893-1570				
Email Address:	vendor@amptius.com				
Authorized Signature:	7/24/2025				

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CRFQ AGR26*01

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

[x]	Addendum No. 1	[ ]	Addendum No. 6
[ ]	Addendum No. 2	[ ]	Addendum No. 7
[ ]	Addendum No. 3	[ ]	Addendum No. 8
[ ]	Addendum No. 4	[ ]	Addendum No. 9
[ ]	Addendum No. 5	[ ]	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

AMP TECH SOLUTIONS LLC
Company


Authorized Signature

07-22-2025
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

Bidder/Vendor:

- **Company Name:** AMP TECH SOLUTIONS LLC DBA: AMPTIUS
- **Address:** 1687 TIMOCUAN WAY, UNIT 109, LONGWOOD, FL 32750
- **Phone:** (407) 893-1570
- **Email:** vendor@amptius.com
- **Signature:**