

Request for Quotation

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ROBERTA WAGNER 304-558-0067

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TYPE NAME/ADDRESS HERE
Thermo Electron North America LLC
1400 Northpoint Pkwy, Ste 50
West Palm Beach, FL 33407

HEALTH AND HUMAN RESOURCES
VARIOUS LOCALES AS INDICATED
BY ORDER

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BUILDING 15	
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CHARLESTON, WV 25305-0130	
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DATE PRINTED:

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

Request for REGINUMBER Quotation

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CME90068

ROBERTA WAGNER <u>304-558-0067</u>

RFQ COPY TYPE NAME/ADDRESS HERE Thermo Electron North America LLC 1400 Northpoint Pkwy, Ste 50 West Palm Beach, FL 33407

TERMS OF SALE:

HEALTH AND HUMAN RESOURCES VARIOUS LOCALES AS INDICATED BY ORDER

FOR

12/15/2008 BID OPENING DATE: 01/22/2009 BID OPENING TIME $01 \cdot 30 PM$ LINE QUANTITY CAT. UOP ITEM NUMBER UNITPRICE AMOUNT IS THE END THIS OF RFQ CME90068 ***** TOTAL: Quote No.2010417\$ \$207,318.61 Quote No.2010418 \$259,500.02 SEE REVERSE SIDE FOR TERMS AND CONDITIONS TELEPHONE EPHONE 11 | 800-532-4752 1/7/09 3-1992201 ADDRESS CHANGES TO BE NOTED ABOVE Order Entry Admin WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

GENERAL TERMS & CONDITIONS REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)

- 1. Awards will be made in the best interest of the State of West Virginia.
- 2. The State may accept or reject in part, or in whole, any bid.
- 3. All quotations are governed by the West Virginia Code and the Legislative Rules of the Purchasing Division.
- 4. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125 fee.
- 5. All services performed or goods delivered under State Purchase Order/Contracts are to be continued for the term of the Purchase Order/Contracts, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods, this Purchase Order/Contract becomes void and of no effect after June 30.
- 6. Payment may only be made after the delivery and acceptance of goods or services.
- 7. Interest may be paid for late payment in accordance with the West Virginia Code.
- 8. Vendor preference will be granted upon written request in accordance with the West Virginia Code.
- 9. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
- 10. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
- 11. The laws of the State of West Virginia and the *Legislative Rules* of the Purchasing Division shall govern all rights and duties under the Contract, including without limitation the validity of this Purchase Order/Contract.
- 12. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.
- 13. BANKRUPTCY: In the event the vendor/contractor files for bankruptcy protection, this Contract may be deemed null and void, and terminated without further order.
- 14. HIPAA BUSINESS ASSOCIATE ADDENDUM: The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, and available online at the Purchasing Division's web site (http://www.state.wv.us/admin/purchase/vrc/hipaa.htm) is hereby made part of the agreement. Provided that, the Agency meets the definition of a Cover Entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the vendor.
- 15. WEST VIRGINIA ALCOHOL & DRUG-FREE WORKPLACE ACT: If this Contract constitutes a public improvement construction contract as set forth in Article 1D, Chapter 21 of the West Virginia Code ("The West Virginia Alcohol and Drug-Free Workplace Act"), then the following language shall hereby become part of this Contract: "The contractor and its subcontractors shall implement and maintain a written drug-free workplace policy in compliance with the West Virginia Alcohol and Drug-Free Workplace Act, as set forth in Article 1D, Chapter 21 of the West Virginia Code. The contractor and its subcontractors shall provide a sworn statement in writing, under the penalties of perjury, that they maintain a valid drug-free work place policy in compliance with the West Virginia and Drug-Free Workplace Act. It is understood and agreed that this Contract shall be cancelled by the awarding authority if the Contractor: 1) Fails to implement its drug-free workplace policy; 2) Fails to provide information regarding implementation of the contractor's drug-free workplace policy at the request of the public authority; or 3) Provides to the public authority false information regarding the contractor's drug-free workplace policy."

INSTRUCTIONS TO BIDDERS

- 1. Use the quotation forms provided by the Purchasing Division.
- 2. SPECIFICATIONS: Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as EQUAL to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.
- 3. Complete all sections of the quotation form.
- 4. Unit prices shall prevail in case of discrepancy.
- 5. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.
- 6. BID SUBMISSION: All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications: Department of Administration, Purchasing Division, 2019 Washington Street East, P.O. Box 50130, Charleston, WV 25305-0130

System Specifications and Requirements for a Liquid Chromatograph/Mass Spectrometer/Mass Spectrometer (LC/MS/MS)

Solvent Delivery System Requirements:

- 1. Flow Rate: Must be 0.010-2.0 ml/min, in 0.001 ml increments.
- 2. **Pressure Stability:** Must be <= 0.5% of system backpressure or 50 p.s.i at 10,000 p.s.i.
- 3. **Gradient Profiles:** Even pre-configured gradient profile shapes must be linear, 2 step, 4 convex, 4 concave.
- 4. **Delay Volume:** Must be >= 120 uL, independent of system pressure (with standard mixer 50 uL).
- 5. **Solvent Selection:** Binary solvent delivery system must allow the user to choose between two mobile phase for each of the two solvent channels for a total of four solvent choices.
- 6. **Compressibility Compensation:** Must be automatic and continuous compressibility compensation, requiring no user intervention.
- 7. **Degassing System:** Must have a built in high efficiency, low volume, 6 chamber vacuum degassing system with a separate channel for each mobile phase solvent and 2 channels for Sample Manager wash solvents.
- 8. **Flow Precision:** Must be </= 0.075% RSD or +/-0.02 min SD, based on retention time with flow accuracy of +/- 1%.
- 9. **Compositional accuracy**: Must be <0.5% and compositional precision must be <0.15% RSD or +/- 0.04 min SD. The solvent delivery system must include an automated software assisted purge function for ease of solvent changing and system purging/priming
- 10. **UPLC Pressure Requirement:** The solvent delivery system must be able to operate at pressures up to 15000 psi up to 1 ml/min, 9000 psi up to 2 ml/min as required for UPLC analysis.
- 11. Seal Wash: Must be integral, active and programmable plunger seal wash system.
- 12. Flow Characteristics: The Solvent Delivery System must be able to run, at flow rates above 0.5 ml/min, newer, smaller particle size columns, such as those with sub-2.0um diameter particles. The system must not require any hardware modifications to be able to run these columns. The system must be also able to run HPLC columns with particle sizes of 3.0, 3.5, 5.0, 7.0 um without any modifications to the system hardware.
- 13. **Inlet Valves:** The Solvent Delivery System must be equipped with controlled intake valves to deliver faster system priming and startup times. More robust operation and highly repeatable system performance are achieved even with difficult-to-pump solvents because disturbances to solvent flow in inlet lines are minimized. The valves actuation is precisely controllable, and the algorithms responsible for its operation respond instantly to the fast, pressure-sensing capability of the Solvent Delivery System.

Sample Management System Requirements:

- 1. Sample Configurations: The Sample Management System must be able to accommodate the following sample configurations without the use of an external sample handling device:
 - 2 x 96 well plates
 - 2 x 384 well plates
 - 2 racks of 2 ml vials (48 vials/rack)
 - 2 racks of 4 ml vials (24 vials/rack)
 - 2 racks of 0.65 ml microcentrifuge tubes (48 tubes/rack)
 - 2 racks of 1.5 ml microcentrifuge tubes (24/rack)
- 2. Injections: Must accommodate 1 to 99 injections per sample, dependant on sample volume available and injection volume.
- Injection Modes: The Sample Manager must support up to THREE injections modes 3. : full loop, partial loop and partial loop using needle overfill (PLNO)
- **Injection Volume:** Injection volume range must be 0.5 50 ul in 0.1ul increments, 4. partial or full loop mode.
- Sample Size: Minimum sample required is 5 ul, using 2ml Maximum Recovery Vials. 5.
- 6. Needle Wash: Needle wash system must wash with up to two solvents to minimize carryover.
- Wash Solvent: Must include fresh solvent for the needle wash with each injection to 7. prevent possibility of carryover.
- Random Access: Must have random access to any vial for multi-method operation. 8.
- Injection Precision: Sample delivery precision must be 0.3% RSD, with a full injector 9. loop, 5-50 ul.
- 10. Injection Linearity: Must be >0.999 coefficient of deviation from 2-10 ul.
- Carryover: Must be better than 0.005% or 2.0 nL of the compound assayed, 11. whichever is greater.
- 12. Sample Temperature: Sample compartment must be controlled from 4 to 40 °C, programmable in 1 °C increments.
- 13. Parallel Injection Capability: The Sample manager must be able to load the injector loop before completion of the last injection.
- 14. Injection Loop Isolation: The injector loop must be removed from the system flow path during injection to minimize carryover and to decrease injection cycle time.

Column Heater Compartment Requirements:

Column Temperature Range: Must be 5 deg C above ambient to 90 deg C. 1.

Other System Requirements:

1. Remote Control: The system must not have a keypad, all instrument control functions must be available through MassLynx or Empower build 1154/2154 software, through third part Control Software and through the Standalone Console software application, or equivalent.

- 2. **System Volume:** Total effective system volume must be less than 120 uL, independent of system pressure. This includes a 10 uL injector loop.
- 3. **Diagnostics:** The System must have diagnostic capabilities: ability to store up to 16 diagnostic data channels, for a total of 96 hours, including piston pressures, system pressure, sample manager pressures, temperature, including ambient, lamp hours, lamp ignitions. The diagnostic data must be collected when the instrument is powered up, regardless of the number of runs or run time set.
- 4. **Diagnostic reporting:** The system must create a standard format .pdf file listing all the diagnostic parameters, including firmware version, usage, such as solvent pumped and number of injections as well as maximum system pressure, error, diagnostic user and informational messages will be documented.
- 5. **Maintenance Information:** The system must provide full maintenance information such as counters for total lamp hour usage, number of ignitions, solvent usage, number of injections etc.
- 6. Export of Diagnostic Data: The system must export diagnostic data, uni-directionally across the internet if enabled by the Connections INSIGHT Agent installed on the same PC that runs Third Party, Console Software, Empower or MassLynx software that controls the system. If a significant event condition is encountered, system performance parameters are passed to a Server via a secure Internet connection. Information is analyzed where an alert can be generated.
- 7. **Graphical Diagnostics:** The system must allow the user to access all diagnostic functions through a graphical interface.
- 8. **UPLC Integration:** The acquisition must apply effective filtering and integration algorithms that are optimized for ultra fast UPLC separations enabled by the detector's fast data rates.
- 9. **Leak Detection:** The system must be equipped with Leak sensing for unattended operation. The sensors must alert the user from the software and graphically locate the location of a leak. The Leak sensors must be capable of resetting in less than 5 minutes. All or a subset of the leak sensors can be enabled or disabled.

Detector System Requirements:

The Detector must be a compact, benchtop, tandem quadrupole mass spectrometer designed for UPLC/MS/MS when configured. The Detector must provide a simple, robust platform for quantitative LC/MS/MS enabled by hi-speed MRM (Multiple Reaction Monitoring) and ESCi® multimode ionization. The system must also incorporate IntelliStart™ Technology for automated system optimization and status monitoring. This ensures high quality data is routinely available to all levels of operators. The system must be available on either MassLynx™ or Empower™ 2 Software, or equivalent.

IntelliStart Technology

1. System Parameter Checking and Alerts: System must be capable of checking all operating parameters and indicating visually and verbally whether or not conditions are acceptable to begin an analysis. Operator must be alerted if any system parameter, either UPLC or MS/MS is out of specification.

- 2. **Integrated sample/calibrant delivery:** System must allow for direct injection of both calibrant and sample, including combining direct injection with UPLC flow for calibration and instrument tuning.
- 3. **Programmable divert valve:** Divert valve must be programmable to allow flow to be automatically diverted to waste when the system is idle.
- 4. Automated Mass Calibration: Instrument Setup must automate calibration and resolution optimization for varying scan speeds (up to 10,000 amu/s)
- 5. **Automated Sample Tuning:** Sample tune must allow the operator to input targeted analyte masses, select the fluidics port and scheme for method development, and set method flow rate.
- 6. **Automated Methods Development:** System must automatically create an optimized set of MS/MS parameters for selected analytes, including cone voltages, optimum MRM parameters, SIR parameters, and confirmation masses.
- 7. **Performance Check:** System must run a predetermined sample set and evaluate all parameters, including tune, calibration, and quantitative parameters and indicate a pass/fail status for subsequent analysis.

SYSTEM GENERAL SPECIFICATIONS

1. ESCI combined source must be:

- a. Combined source for simultaneous electrospray/APCI operation or equal.
- b. ZSpray™ dual-orthogonal source for robust sampling or equal.
- c. Vacuum isolation valve or equal.
- d. Tool-free sampling cone removal or equal.
- e. Plug and play probes or equal.
- f. De-clustering cone gas or equal.
- g. Software control of all gas flows or equal.

2. Ionization modes:

ESCi multimode ionization must be included as standard.

3. Ion Source Transfer Optics:

Must include a high efficiency hexapole ion guide.

4. Mass analyzer:

Must include two high resolution quadrupole analyzers (MS1/MS2) plus pre-filters to maximize resolution and transmission while preventing contamination of the main analyzers.

5. Collision cell:

- a. Must include T-Wave™ or equal collision cell traveling wave device with beam focusing at ion entry and exit for optimum ion transfer and confinement, allowing fast MS/MS acquisition.
- b. Must include software programmable gas flow.

6. Detector must be:

- a. Low noise, off axis, long life photomultiplier detector.
- b. Must include digital dynamic range up to 4 x 106.

7. Vacuum system must include:

- a. Single, split flow air-cooled Pfeiffer Vacuum turbomolecular pump evacuating the source and analyzer or equal.
- b. One Leybold Sogevac SV40BI rotary backing pump or equal.

8. Software:

- a. Must be Mass Lynx 4.1, or equivalent
- b. MassLynx, or equivalent must include OpenLynx™ and QuanLynx™ Application Managers as standard.

9. Dimensions must be:

- a. Width: 35.6 cm (14.0 in.) maximum
 b. Height: 53.3 cm (21.0 in.) maximum
 c. Depth: 84.8 cm (33.5 in.) maximum
- 10. Regulatory approvals must include:

IVD, NRTL, and CE.

PERFORMANCE SPECIFICATIONS

1. Acquisition modes must be:

- a. Full scan MS (MS1 or MS2)
- b. Selected ion recording (SIR)
- c. Product ion scan
- d. Precursor ion scan
- e. Constant neutral loss/gain
- f. Multiple reaction monitoring (MRM)

2. Mass range

2 to 2000 m/z

3. Scan speed

.Up to 10,000 Daltons/sec

4. Mass stability

<0.1Daltons over 8 hr

5. Linearity of response

The linearity of response relative to sample concentration, for a specified compound, must be five orders of magnitude from the limit of detection.

6. Polarity switching

Must be <=20 ms switching time between positive and negative ion modes without significant degradation in data quality.

7. MRM acquisition cycle time

Minimum dwell time must be 5 ms per channel. Minimum inter-channel and inter-scan delays must be 5 ms. Functions must be configured in retention windows, including mixed mode and overlapping, to optimize cycle time for each analyte.

8. Inter-channel cross talk

The inter-channel cross talk between two MRM transitions, acquired using an MRM dwell time of 10 ms and an inter-channel delay time of 10 ms, must be fewer than 0.02%.

9. Mass resolution

Must be tunable manually or automatically (IntelliStart) or equal to desired resolution. The valley between the 2034.63 Da and 2035.63 Da peaks must be <12% of the average height of the two peaks.

10.RM sensitivity (ESI+)

For a direct loop injection of reserpine (5 pg) at a flow rate of 200 uL/min the chromatographic signal to noise for the transition 609>195 m/z must be greater than 1000:1.

11.RM sensitivity (ESI-)

For a direct loop injection of chloramphenicol (5 pg) at a flow rate of 200 uL/min, the chromatographic signal-to-noise ratio for the transition 321 > 152 m/z must be greater than 180:1.

12.RM sensitivity (APCI+)

For a direct loop injection of 17-á-hydroxyprogesterone (100 pg) at a flow rate of 1 mL/min, the chromatographic signal-to-noise ratio for the transition 331 > 109 m/z must be greater than 150:1.

13. MRM Signal to noise definition

Signal is defined as the height of the chromatographic peak of interest and noise is defined as the RMS of a continuous section of the mass chromatogram.

UPLC-MS/MS Workstation and Software

1. General Software Specifications

- a. Software must accommodate simultaneous positive and negative ion data during a single UPLC/MS/MS chromatographic run
- b. Software must allow for switching of cone voltage and collision energy on a per function basis during a single UPLC/MS/MS chromatographic run
- c. Software must support automatic tuning for automated MS/MS setup
- d. Software must support automated MS/MS tuning for analytical components
- e. Software must support automated monitoring of instrument vacuum, gas flows, and voltages to warn the user of out of tolerance parameters

2. Target Compound Software, or equivalent

- a. System must include the **Target Lynx** software package, or equivalent for positive identification of targeted compounds, including the following confirmatory checks:
 - -Analytes above a Maximum Reporting Level (MRM)
 - -Analyte confirmatory ion ratios are outside specified limits
 - -One or more analyte signal-to-noise ratios are below a defined value

- -An analyte retention time or relative retention time is outside limits
- -An analyte concentration is below set LOD and LQD thresholds
- -The standard deviation of response for QC standards exceeds a defined value
- -The blank response is too high
- -The coefficient of determination (r²) of the calibration curve exceeds a defined Value
- b. System must include a library for Toxicology screening, and a project with all files necessary for the acquisition (tune page, UPLC method, MRM method) and processing for target compounds using Target Lynx software
- c. Automatic Adjustment of Ion Ratios: the software must be able to compensate for variation in ion ratios, typically due to changes in tuning conditions, for a specified compound. By including a reference standard in the sample sequence the expected ion ratios for the target compounds and succeeding samples must be automatically adjusted to match the ratios for the target compounds in the reference standard, so that manual adjustment of ion ratios is not required upon retuning of the instrument.
- d. Cross compound calibration curves: the software must allow calibration curves to be applied to additional compounds in an analysis mixture for which standards or curves do not exist.
- e. Vendor must provide support for equipment and software.

3. Workstation Hardware

System must have an Intel Core 2 Duo E6400 processor or equivalent operating at 2.13 MHz or faster. Operating system: Windows XP Professional SP2. System Warranty: Three Years Onsite for PC hardware.

System Warranty:

1. UPLC/MS/MS Warranty Coverage

All UPLC and MS/MS components and hardware must be covered by a one year onsite repair service.

2. Workstation Warranty

Computer workstation and monitor must be covered by a three year on-site warranty service

Additional Requirements:

- 1. Delivery and installation of hardware and software must be within 90 days of the approved purchase order.
- 2. Software familiarization must be performed at installation to the OCME staff.
- 3. Vendor must manufacture both MS/MS and TOF systems.
- 4. Vendor must supply all available MS/MS libraries toxicology, drug, and pesticide.
- Training of Office of the Chief Medical Examiner's personnel must include 2 days of custom on-site training to be provided within 4 weeks after installation of equipment at the expense of the vendor. Training will incorporate OCME staff, and will take place at the OCME Toxicology laboratory located at 619 Virginia Street, West, Charleston, WV 25302.
- 6. Due to space constraints, LC and MS footprint must not exceed 30 inches.

System Specifications and Requirements for a Liquid Chromatograph/Time of Flight Mass Spectrometer (LC/TOF-MS)

Solvent Delivery System Requirements:

- 1. Flow Rate: Must be 0.010-2.0 ml/min, in 0.001 ml increments.
- 2. **Pressure Stability:** Must be <= 0.5% of system backpressure or 50 p.s.i at 10,000 p.s.i.
- 3. **Gradient Profiles:** Even pre-configured gradient profile shapes (linear, 2 step, 4 convex, 4 concave)
- 4. **Delay Volume:** Must be >= 120 uL, independent of system pressure (with standard mixer 50 uL)
- 5. Solvent Selection: Binary solvent delivery system must allow the user to choose between two mobile phase for each of the two solvent channels for a total of four solvent choices.
- 6. Compressibility Compensation: Must allow automatic and continuous compressibility compensation, requiring no user intervention.
- 7. **Degassing System:** Must be built in high efficiency, low volume, 6 chamber vacuum degassing system with a separate channel for each mobile phase solvent and 2 channels for Sample Manager wash solvents.
- 8. Flow Precision: Must be </= 0.075% RSD or +/-0.02 min SD, based on retention time with flow accuracy of +/- 1%.
- Compositional accuracy: Must be <0.5% and compositional precision is <0.15% RSD or +/- 0.04 min SD. The solvent delivery system must include an automated software assisted purge function for ease of solvent changing and system purging/priming
- 10. UPLC Pressure Requirement: The solvent delivery system must be able to operate at pressures up to 15000 psi up to 1 ml/min, 9000 psi up to 2 ml/min as required for UPLC analysis.
- 11. Seal Wash: Must be integral, active and programmable plunger seal wash system.
- 12. Flow Characteristics: The Solvent Delivery System must be able to run, at flow rates above 0.5 ml/min, newer, smaller particle size columns, such as those with sub-2.0 um diameter particles. The system must not require any hardware modifications to be able to run these columns. The system must be also able to run HPLC columns with particle sizes of 3.0, 3.5, 5.0, 7.0 um without any modifications to the system hardware.
- 13. Inlet Valves: The Solvent Delivery System must be equipped with controlled intake valves to deliver faster system priming and startup times. More robust operation and highly repeatable system performance are achieved even with difficult-to-pump solvents because disturbances to solvent flow in inlet lines are minimized. The valves actuation must be precisely controllable, and the algorithms responsible for its operation respond instantly to the fast, pressure-sensing capability of the Solvent Delivery System.

Sample Management System Requirements:

- 1. **Sample Configurations:** The Sample Management System must be able to accommodate the following sample configurations without the use of an external sample handling device:
 - 2 x 96 well plates
 - 2 x 384 well plates
 - 2 racks of 2 ml vials (48 vials/rack)
 - 2 racks of 4 ml vials (24 vials/rack)
 - 2 racks of 0.65 ml microcentrifuge tubes (48 tubes/rack)
 - 2 racks of 1.5 ml microcentrifuge tubes (24/rack)
- 2. **Injections:** Must allow 1 to 99 injections per sample, dependant on sample volume available and injection volume.
- 3. **Injection Modes:** The Sample Manager must support up to THREE injections modes : full loop, partial loop and partial loop using needle overfill (PLNO)
- 4. Injection Volume: Injection volume range must be 0.5 50 uL in 0.1 uL increments, partial or full loop mode.
- 5. Sample Size: Minimum sample required must be 5 uL, using 2 mL Maximum Recovery Vials.
- 6. **Needle Wash:** Needle wash system must wash with up to two solvents to minimize carryover.
- 7. Wash Solvent: Must include fresh solvent for the needle wash with each injection to prevent possibility of carryover.
- 8. Random Access: Must allow random access to any vial for multi-method operation.
- 9. **Injection Precision:** Sample delivery precision must be 0.3% RSD, with a full injector loop, 5-50 uL.
- 10. Injection Linearity: Must be >0.999 coefficient of deviation from 2-10 uL.
- 11. Carryover: Must be better than 0.005% or 2.0 nL of the compound assayed, whichever is greater.
- 12. Sample Temperature: Sample compartment must be controlled from 4 to 40 °C, programmable in 1 °C increments.
- 13. Parallel Injection Capability: The Sample manager must be able to load the injector loop before completion of the last injection
- 14. Injection Loop Isolation: The injector loop must be removed from the system flow path during injection to minimize carryover and to decrease injection cycle time.

Column Heater Compartment Requirements:

1. Column Temperature Range: Must be 5 deg C above ambient to 90 deg C.

Other System Requirements:

- Remote Control: The system must not have a keypad and all instrument control functions must be available through MassLynx or Empower build 1154/2154 software, through third part Control Software and through the Standalone Console software application, or equivalent.
- 2. **System Volume:** Total effective system volume must be less than 120 uL, independent of system pressure. This must include a 10 uL injector loop.

- 3. **Diagnostics:** The System must have diagnostic capabilities: ability to store up to 16 diagnostic data channels, for a total of 96 hours, including piston pressures, system pressure, sample manager pressures, temperature, including ambient, lamp hours, lamp ignitions. The diagnostic data must be collected when the instrument is powered up, regardless of the number of runs or run time set.
- 4. **Diagnostic reporting:** The system must create a standard format .pdf file listing all the diagnostic parameters, including firmware version, usage, such as solvent pumped and number of injections as well as maximum system pressure, error, diagnostic user and informational messages will be documented.
- 5. **Maintenance Information:** The system must provide full maintenance information such as counters for total lamp hour usage, number of ignitions, solvent usage, number of injections etc.
- 6. Export of Diagnostic Data: The system must export diagnostic data, uni-directionally across the internet if enabled by the Connections INSIGHT Agent installed on the same PC that runs Third Party, Console Software, Empower or MassLynx software that controls the system, or equivalent. If a significant event condition is encountered, system performance parameters are passed to a Server via a secure Internet connection. Information must be analyzed where an alert can be generated.
- 7. **Graphical Diagnostics:** The system must allow the user to access all diagnostic functions through a graphical interface
- 8. **UPLC Integration:** The acquisition must apply effective filtering and integration algorithms that are optimized for ultra fast UPLC separations enabled by the detector's fast data rates
- 9. **Leak Detection:** The system must be equipped with Leak sensing for unattended operation. The sensors must alert the user from the software and graphically locate the location of a leak. The Leak sensors must be capable of resetting in less than 5 minutes. All or a subset of the leak sensors can be enabled or disabled.

Ionization Source:

1. API Source:

The instrument must be equipped with an atmospheric pressure ionization (API) LC interface that includes the source and spraying elements. Samples may be introduced by direct infusion via a syringe, or the system may be interfaced directly to a HPLC system.

2. Source Design:

The ion source must be a dual orthogonal design. The nebulized sprayer must be positioned orthogonally to the sampling orifice and be positioned off-axis for maximum source longevity and analyzer protection against "dirty" samples.

3. LC Inlet:

The LC inlet probe must be positioned vertically to minimize system footprint, reduce the length of connecting tubing and reduce the potential for chromatographic peak broadening.

4. Maintenance:

A source access door must be incorporated to allow easy access to the spraying elements for cleaning without the need to remove the ion source enclosure. A toughened glass window must be incorporated into the door to allow easy viewing of the source.

5. Isolation Valve:

An isolation valve must be fitted to the source to allow the source elements to be removed and cleaned without breaking instrument vacuum, maximizing instrument uptime.

6. Declustering:

The source must include the facility to de-cluster ions formed at atmospheric pressure.

7. Cone Gas Control:

The desolvation and cone gas must be supplied via digitally controlled mass flow meters and be controlled via the data system.

8. Nitrogen Grade:

The ion source must be able to use Zero Grade Nitrogen (standard lab grade) for the desolvation and cone gas.

9. Positive/Negative Ionization:

Positive and negative ionization capabilities must be included as standard on the instrument (0.3secs inter-scan delay).

10. Source Voltages:

All source voltages must be under data system control and must incorporate active read backs.

11. Electrospray Source:

Electrospray (ESI) must be provided as an option with the instrument. The ESI must incorporate a heated gas flow, separate from the probe nebulizer, for efficient desolvation. No supplement heater or probe is required to work over the 5-1000 uL/min flow range. The probe must incorporate the facility to adjust the sprayer tip length in-situ to allow easy optimization of ionization.

12. Dual Electrospray Facility (Lock-Spray):

The instrument must include as an option a dual electrospray facility to allow simplified exact mass measurements. The ionization source must incorporate a standard ESI probe, a secondary ESI probe that is positioned diametrically opposite to the standard probe to introduce a reference mass, and a motor driven baffle that is positioned between the two sprayers to allow indexed sampling of the two sprayers.

13. Multi-Mode Source:

A combined multi-mode ESI/APcI source (ESCiTM) must be provided as standard with the instrument. ESI and APcI ionization is achieved using a single probe. Voltage supplies are alternated between the probe (ESI) and the corona pin (APcI) in rapid speeds (10msecs). The facility of combined ESI/APcI provides the facility of switching between the two ionization types during a single LCMS experiment. The data from both the ESI and APcI ionization modes must be contained within separate data streams within the single data file to maintain integrity of information.

14. ESCI/Lock-Spray Operation:

The dual ESI/APcI (ESCi) must operate with the dual electrospray (LockSpray) ionization source to allow simplified exact mass measurements for compounds of different polarities. This facility must be provided as standard with the instrument.

Oa-Time-of-Flight Mass Analyzer:

1. Ion Transport:

Ions produced in the source region of the instrument must be transmitted to the TOF analyzer via 3 high efficiency Rf ion guides.

2. Ion Focusing:

Prior to entering the TOF analyzer, the ion beam must be spatially and time focused using a series of digitally controlled lens and grids.

3. Beam Geometry:

The ion beam must be injected (pulsed) orthogonally into the TOF analyzer at a repetition rate up to 30kHz.

4. Dual Mode Geometry:

- a. The TOF analyzer must consist of a high precision reflectron mirror at the opposing end to the pusher to reverse the flight path of the ions towards the detector system (V Mode TOF geometry). The effective flight length in V Mode geometry must be 0.8m.
- b. An additional reflectron mirror must be incorporated into the TOF analyzer between the pusher and the detector, to allow ions to travel through the analyzer a second time (W Mode TOF geometry). The effective flight length in W Mode geometry must be 1.6m.

Resolution:

- a. The oa-TOF analyser must be capable of providing up to 15,000 FWHM resolution using W mode geometry.
- b. The oa-TOF analyzer must be capable of providing greater than 10,000 FWHM resolution at m/z values less than 200Da.
- c. The user must be able to easily select either V or W Mode via the data system to provide on-site spectral resolution of >6000 FWHM in V Mode and >12,000 FWHM in W Mode.

5. Mass Range:

The mass range of the analyser must be up to 30,000 m/z in V Mode (18,000 m/z in W Mode).

6. Detector:

- The detection system must incorporate a dual microchannel plate and anode assembly, electrically isolated for optimum positive and negative ion detection.
- b. Ion arrival times must be recorded using a time-to-digital converter (TDC) with an acquisition rate of 4 GHz to provide excellent peak definition and mass accuracy.

7. Positive/Negative Switch Time:

The switching time for positive/negative ion detection must occur during an LCMS experiment, with a minimum inter-scan delay time of 300milliseconds.

8. Acquisition Rate:

The TOF must be able to acquire full spectral data at rates up to 20 spectra/sec.

9. Dynamic Range:

The analyzer must have the capability of acquiring data over 4 orders of magnitude, enabled through the use of a dynamic range enhancement system via fast ion transmission switching.

Vacuum System:

1. Differentially pumped, automated vacuum system:

a. There must be a single, air-cooled, three stage turbomolecular pump that

- evacuate the transfer and analyzer regions, eliminating the need to an external water chiller unit.
- b. There must be a single E1M18 rotary pump that evacuates the source region (provided as standard)
- c. There must be a single E2M28 rotary pump that provides backing for the turbomolecular pump (provided as standard)
- d. An active Pirani gauge must be fitted to the source region to monitor the pressure.
- e. A Penning gauge must be fitted to the analyzer to monitor the vacuum.
- f. Vacuum read backs and system vent/pump cycles must be digitally monitored and controlled, to provide total software control and ensure fail-safe operation in event of a power failure.
- g. Isolation valves must be fitted to both rotary pumps to ensure that no oil is pumped back through the vacuum lines to the instrument in the event of an electricity supply failure of the rotary pumps.

Performance Specifications:

1. Mass Range:

The mass range of the instrument must be 20 to 30,000 m/z in V Mode and 20 to 18,000 m/z in W Mode.

2. Data Acquisition Rate:

The TOF analyzer must be capable of acquiring data up to 20 spectra/sec in both continuum and centroid data formats.

3. Cone Voltage:

The cone voltage must be programmable up to 200V to provide in source CID

4. Polarity Switching:

The instrument must be capable of switching ionization polarity during an LCMS acquisition with a minimum inter-scan delay of 300millisecs.

5. Time of Flight Mass Resolution Positive Ion:

- (a) V Mode
- >6000 FWHM measured on the [M+4H]4+ isotope cluster of melittin (m/z 712)
- (b) W Mode
- >12,000 FWHM measured on the [M+4H]4+ isotope cluster of melittin (m/z 712)

6. Time of Flight Mass Resolution Negative Ion:

- (a) V Mode
- >6000 FWHM measured on the [M-H]- ion of raffinose (m/z 503)
- (b) W Mode
- >12,000 FWHM measured on the [M-H]- ion of raffinose (m/z 503)

7. Electrospray Signal to Noise Sensitivity:

Using electrospray positive ionization, the average signal to noise (peak to peak) on 10 pg of reserpine must be greater than 100:1. This must be demonstrated using a 1 pg/uL solution of reserpine, injecting 10 uL of sample onto a C18, 2.1x30mm HPLC column at a flow rate of 300 uL/min. The mobile phase must consist of 75%/25% methanol/water containing 5mM ammonium acetate. Five repeat injections must be carried and the signal to noise should be calculated on the chromatogram produced by the molecular ion of

reserpine (m/z 609.2812).

8. Infusion Sensitivity—ESI Positive Ion:

This must be demonstrated using a solution of leucine enkephalin (50 pg/uL dissolved in 50/50 acetonitrile/water+0.1% formic acid) infused at 5 uL/min. In V Mode (>6000 FWHM), the [M+H]+ ion at m/z 556 must demonstrate a signal height greater than 500 counts per second. In W Mode (>12,000 FWHM), the signal height must be greater than 250 counts per second.

9. Infusion Sensitivity—ESI Negative Ion:

This must be demonstrated using a solution of raffinose (500 pg/uL dissolved in 50/50 methanol/water) infused at 10 uL/min. In V Mode (>6000 FWHM), the signal height must be greater than 400 counts per second. In W Mode (>12,000 FWHM), the signal height must be greater than 200 counts per second.

10. Mass Measurement Accuracy:

Using the dual sprayer exact mass ion source in ESI positive ion, the mass measurement accuracy of the instrument must be demonstrated to be less than 3ppm RMS error. This must be demonstrated on the [M+Na]+ ion of raffinose (m/z 527.1588) using a single point lock mass (leucine enkephalin, m/z 556.2771), at a resolution greater than 10,000 FWHM and based on 10 repeat measurements. Analyte and lock mass peaks must have sufficient intensity and be free from interference from other masses.

11. Low M/Z Resolution:

Must be greater than 10,000 FWHM measured on the m/z181 ion from sodium format (W Mode).

12. Ion Mode Polarity Switching Mass Accuracy:

At a resolution greater than 12,000 FWHM, the RMS error between the measured and accepted masses of peaks which have sufficient intensity and are free from interference from other masses must be less than 2.0mDa over the range 50 - 400Da and must be less than 5ppm over the range 400 - 900Da. The maximum acquisition rate is 2.5 scans/second. This is demonstrated using LockSpray, with a sodium formate solution as the analyte and leucine enkephalin ([M+H]+=556.2771, [M-H]-=554.2615) as the single point lock mass.

13. Isotope Ratios:

The RMS error between the measured and accepted isotope ratios of the A+1 and A+2 (where A = the monoisotopic molecular ion) of leucine enkephalin infused at 0.1 ions per push must be less than 2%.

Additional Hardware Features:

1. Syringe Pump:

An integral syringe pump, controlled through the instrument software, must be included. It must be operated over the flow rate range of 1-1000 uL/min and must be capable of accepting a wide variety of syringe sizes. It must include an autostop facility.

2. Electronic Injection Valve:

An electronic injection valve of Rheodyne design must be incorporated into the instrument and must be accessible from the front panel. The valve state must be controlled from either the front panel of the instrument or the control software. The electronic injection valve must be programmable from the software to allow it to be used as a divert valve for LCMS experiments.

3. Footprint:

- 1. LCT dimensions are 26 in x 33 in x 32 in (H x W x D) maximum.
- 2. UPLC dimensions are 26 in x 14 in x 29 in (H x W x D) maximum.

UPLC-MS/TOF Workstation and Software:

1. General Software Specifications:

- a. The MS control software must be a Windows based platform and have the ability to control both the MS and specified HPLC devices.
- b. The data processing software must incorporate an elemental composition calculator as standard. Included into the calculator must be algorithms for isotope pattern modeling that allow data interpretation of actual isotope patterns. A goodness of fit from actual to theoretical isotopes must be included. The ability to filter out incorrect elemental composition calculations through the use of intelligent spectral interpretation algorithms must be incorporated.
- c. An embedded personal computer acquisition system (EPCAS) must be incorporated to the chassis of the instrument to allow data acquisition and dynamic instrument control.
- d. The MS software must incorporate wizards that aid the user to set up the operation of the instrument. Functionality must include auto-calibration, set up of the detector gain and set up of the reference mass for exact mass measurement over the widest available dynamic range. The wizard functionality must provide dialog to keep the user updated on progress throughout the procedure.
- e. The following type of spectral data must be acquired on the instrument:
 - i. Multi-channel analysis (MCA, profile) data
 - ii. Continuum (profile) data
 - iii. Centroid (stick) data
- f. The instrument must have the ability to acquire simultaneous positive and negative ion data during an LCMS experiment.
- g. The instrument must be able to switch cone voltage on a per function basis to provide in source collision induced dissociation (CID).
- h. In centroid data acquisition, a single point lock mass must be specified to provide an exact mass measurement in real-time. The scan frequency at which the reference sprayer is sampled must be user specified.

2. Must include MS Deconvolution Software (Chromalynx Software Manager), or equivalent:

The system must include the Chromalynx Software Manager for MS deconvolution including accurate mass deconvolution for identification and screening of known and unknown compounds in complex mixtures, or equivalent.

- a. Spectral Deconvolution for the generation of "clean" mass spectra from closely eluting compounds in complex mixtures.
- b. Automated Library Searching. Results from elemental composition must all to be searched against available libraries.
- c. Semi-Quantitative Determinations. Chromalynx must generate a percentage figure corresponding.

d. Chromatographic Comparison.

3. Workstation Hardware

System must have an Intel Core 2 Duo E6400 processor or equivalent operating at 2.13 MHz or faster. Operating system: Windows XP Professional SP2. System Warranty: Three Years Onsite for PC hardware.

4. Vendor must provide support for equipment and software.

System Warranty:

1. UPLC/MS/MS Warranty Coverage

All UPLC and MS/MS components and hardware must be covered by a one year onsite repair service.

2. Workstation Warranty

Computer workstation and monitor must be covered by a three year on-site warranty service.

Additional Requirements:

- 1. Delivery and installation of hardware and software must be within 120 days of the approved purchase order.
- 2. Software familiarization must be performed at installation to the OCME staff.
- 3. Vendor must manufacture both MS/MS and TOF systems
- 4. Vendor must supply all available MS/MS libraries toxicology, drug, and pesticide
- 5. Training of Office of the Chief Medical Examiner's personnel must include 2 days of custom on-site training to be provided within 4 weeks after installation of equipment at the expense of the vendor. Training will incorporate OCME staff and will take place at the OCME Toxicology Laboratory located at 619 Virginia Street, West, Charleston, WV 25302.
- 6. Vendors bidding on alternate product/equipment must provide pertinent literature/specifications.

RFQ Cost Sheet

Bidders shall provide a cost for the following:

Waters Product Name	Waters	Quantity	Cost
LC/TOF-MS Acquity/LCT Premier XE or equal	176001227	1	
TQD Tandem Quadrupole MS/MS or equal	176001263	1	
Mass Lynx 4.1, M55 & XP TQD or equal	176001114	1	
Mass Lynx 4.1, M55 & XP TQD or equal	176001255	1	
ChromaLynx V4.1 or equal	176001063	1	
Cord Kit USA or equal	205000414	1	
TargetLynx V4.1 or equal	176001086	1	
Acquity UPLC, Column heater, Solvent manager, Sample manager or equal	176015000	2	
Acquity BEH C18 column 3 pack or equal	176000864	2	
20" Flat Panel Monitor or equal	668000273	2	
	GR	AND TOTAL	\$259,500.02

The award will be made to the vendor with the lowest overall total cost of the equipment which meets all requested specifications and requirements.

Payment will be made in arrears after receipt of completed order.

Vilne Dizade	1/7/09	
Vendor Signature	Date	

REQ No. Ch	NE8	00	68
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STATE OF WEST VIRGINIA Purchasing Division

PURCHASING AFFIDAVIT

VENDOR OWING A DEBT TO THE STATE:

West Virginia Code §5A-3-10a provides that: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

PUBLIC IMPROVEMENT CONTRACTS & DRUG-FREE WORKPLACE ACT:

West Virginia Code §21-1D-5 provides that: Any solicitation for a public improvement construction contract shall require each vendor that submits a bid for the work to submit at the same time an affidavit that the vendor has a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the West Virginia Code. A public improvement construction contract may not be awarded to a vendor who does not have a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the West Virginia Code and who has not submitted that plan to the appropriate contracting authority in timely fashion. For a vendor who is a subcontractor, compliance with Section 5, Article 1D, Chapter 21 of the West Virginia Code may take place before their work on the public improvement is begun.

ANTITRUST:

In submitting a bid to any agency for the state of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the state of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the state of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the state of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership or person or entity submitting a bid for the same materials, supplies, equipment or services and is in all respects fair and without collusion or fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

LICENSING:

Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agencies or political subdivision. Furthermore, the vendor must provide all necessary releases to obtain information to enable the Director or spending unit to verify that the vendor is licensed and in good standing with the above entities.

CONFIDENTIALITY:

The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures and rules. Vendors should visit www.state.wv.us/admin/purchase/privacy for the Notice of Agency Confidentiality Policies.

Under penalty of law for false swearing (West Virginia Code §61-5-3), it is hereby certified that the vendor acknowledges the information in this said affidavit and is in compliance with the requirements as stated.

Vendor's Name:The	ermo Electron	North America	LLC	•	
Authorized Signature:	Velmen	Delgade	Date:	1/09/09	
Purchasing Affidavit (Revised	1 07/01/08)	\circ			

State of West Virginia

VENDOR PREFERENCE CERTIFICATE

Certification and application* is hereby made for Preference in accordance with West Virginia Code, §5A-3-37. (Does not apply to construction contracts). West Virginia Code, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the West Virginia Code. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Resident Vendor Preference, if applicable.

1.	Application is made for 2.5% resident vendo Bidder is an individual resident vendor and has re ing the date of this certification; or,	sided continu	ously in West Virg	inia for four (4) year	- •
	Bidder is a partnership, association or corporation business continuously in West Virginia for four (4 ownership interest of Bidder is held by another in- maintained its headquarters or principal place of preceding the date of this certification; or,	l) years imme dividual, parti of business co	diately preceding nership, associatio ontinuously in We	the date of this cert on or corporation res st Virginia for four	ification; or 80% of the sident vendor who has (4) years immediately
	Bidder is a nonresident vendor which has an affilia and which has maintained its headquarters or pri years immediately preceding the date of this cert	ncipal place o	ry which employs of business within	a minimum of one h West Virginia contir	undred state residents nuously for the four (4)
2.	Application is made for 2.5% resident vendor. Bidder is a resident vendor who certifies that, do working on the project being bid are residents of vimmediately preceding submission of this bid; or	uring the life (Vest Virginia	of the contract, on	average at least 7	5% of the employees ously for the two years
3.	Application is made for 2.5% resident vendor Bidder is a nonresident vendor employing a mini affiliate or subsidiary which maintains its headque minimum of one hundred state residents who ce employees or Bidder's affiliate's or subsidiary's continuously for the two years immediately precedents.	mum of one uarters or pri rtifies that, du employees ar	hundred state res ncipal place of bu iring the life of the e residents of We	idents or is a nonre siness within West contract, on avera st Virginla who hav	Virginia employing a ge at least 75% of the
4.	Application is made for 5% resident vendor ${\bf p}$ Bidder meets either the requirement of both subd	oreference fo ivisions (1) ar	or the reason che nd (2) or subdivisio	ecked: on (1) and (3) as sta	ted above; or,
5.	Application is made for 3.5% resident vendor Bidder is an individual resident vendor who is a vete and has resided in West Virginia continuously f submitted; or,	eran of the Un	ited States armed	forces, the reserves	or the National Guard
6.	Application is made for 3.5% resident vendor Bidder is a resident vendor who is a veteran of the purposes of producing or distributing the commod continuously over the entire term of the project, or residents of West Virginia who have resided in the	e United Stat ities or compl on average at	es armed forces, t eting the project w : least seventy-five	he reserves or the l hich is the subject o percent of the ver	National Guard, if, for f the vendor's bid and idor's employees are
requiren against:	inderstands if the Secretary of Revenue determin nents for such preference, the Secretary may orde such Bidder in an arnount not to exceed 5% of the cted from any unpaid balance on the contract or pu	er the Director bid amount a	of Purchasing to: Ind that such pena	(a) reject the bid; or	r (b) assess a penalty
authorize the requ	nission of this certificate, Bidder agrees to disclose es the Department of Revenue to disclose to the Dir ired business taxes, provided that such informatio by the Tax Commissioner to be confidential.	ector of Purch	nasing appropriate	information verifyin	g that Bidder has paid
and acc	enalty of law for false swearing (West Virginia urate in all respects; and that if a contract is s during the term of the contract, Bidder will r	issued to B	dder and if anyt rchasing Divisio	hing contained wi on in writing imme	ithin this certificate
Bidder:	Thermo Electron North America LLC	Signed:	Velyna	Deale)
Date:	1/09/09	Title: Ord	ler Entry A	dministrato	r

^{*}Check any combination of preference consideration(s) indicated above, which you are entitled to receive.



Thank you for your interest in Thermo Scientific instrumentation.

Attached is a quotation from your local sales representative. Please do not hesitate to contact us if you have any questions regarding this quotation.

Please note the following information to facilitate placing an order:

Vendor Name:

Thermo Electron North America LLC

Phone:

800-532-4752

FEIN: D&B: 43-1992201 13-838-8090

Cage Code:

3WXJ7

PO Address:

1400 Northpoint Parkway, Suite 50

West Palm Beach, FL 33407

Fax #561-688-8731

OR

5225 Verona Road Madison, WI 53711 Fax #608-273-6882

Remittance Information:

Accounts Receivable phone: 561-688-8755

Lockbox/Check Payments

Electronic Payments

Thermo Electron North America LLC	Thermo Electron North America LLC
PO Box 712102	Bank of America
Cincinnati, OH 45271-2102	New York, NY
	Account #4426395065
]	ABA Routing ACH #111000025
	ABA Routing WIRE #026009593
	SWIFT BOFAUS3N

Please include the following with your PO:

Payment terms: Net 30 days

Freight terms: FOB Origin, charges ppd & added to invoice

Tax Status: Taxable or Tax Exempt

Your standard PO terms & conditions if applicable



QUOTATION

Thermo Efectron North America LLC a subsidiary of Thermo Electron Corporation

Tel: 800-532-4752 FEIN: 43-1992201

Submitted to:

STATE OF WEST VIRGINIA **DEPT OF ADMINISTRATION** PURCHASING DIVISION RFQ NO. CME90068 2019 WASHINGTON STREET, EAST **CHARLESTON WV 25311**

Quote Number:

20104170

Quote Date:

01/16/2009

Contact Name:

ROBERTA WAGNER

Telephone No: Fax No:

304-558-0067

304-558-4115

Validity From:

01/16/2009 To: 03/19/2009

Page	Shipment	F.O.B	Terms
1/6	60-90 Days ARO	DEST. PREPAY & ADD	NET 30 DAYS UPON INVOICE DATE (Payment Terms Subject to Credit Approval)

SALES REP: GIOVANNI PALLANTE/vd

EMAIL: giovanni.pallante@thermofisher.com

REF: RFQ NO. CME90068

DUE DATE & TIME: JANUARY 22, 2009 @ 1:30PM Quantity Catalog Number/Description Item

Unit Price

Total Price

10

1EA

TSQ-40000-10

TSQ QUANTUM ACCESS ACCELA BUNDLE

277,827.00 EA

277,827.00

Material Net Value For Item 80,877.00-

196,950.00

TSQ MS/MS high performance triple stage-quadrupole mass spectrometer TSQ Quantum Access Triple Stage Quadrupole MS/MS System

High performance Ion Max S API inlet source housing (probes sold separately). Analyzer includes stabilized analyzer control board, integrated vacuum manifold with two RF only square quadrupole ion optics, Two 250 mm hyperbolic quadrupole mass analyzers, ninety degree square quadrupole collision cell, and 15 kV dynode and off axis electron multiplier detection system for positive and negative ion detection. Vacuum system includes single three-port turbo molecular pump, and one rotary vacuum pump. System also features an integrated single barrel syringe pump, integrated electronically activated injector/divert valve, 30-3000 amu mass range, 2000 amu/sec scan speed, and 195 kHz digital sampling rate.

Includes one electrospray ionization (ESI) probe for the Ion Max source.

Hypersil GOLD Column included

Minimum Computer System specifications: Processor: Intel(r) Dual Core 1.86 GHz Processors Memory: 2 GB



QUOTATION

Thermo Etectron North America LLC a subsidiary of Thermo Electron Corporation Tel: 800-532-4752

FEIN: 43-1992201

No. 20104170 Page 2 / 6

Continuation of Quotation

Item Quantity Catalog Number/Description Unit Price Total Price

Monitor: 19" LCD flat panel monitor

Video: Integrated 128Mb nVidia graphics card

Hard Drive: 250 GB hard drive

Floppy Drive: 3.5" 1.44MB diskette drive

DVD: 16x DVD+RW/+R

Case: Highly Serviceable Mid-tower Case

Keyboard: 104+ keyboard Mouse: Dell mouse

Operating System: Windows XP Professional SP2

Expansion Slots: 2 full length PCI slots

Network Card: Broadcom Broadcom NetXtreme 10/100/1000Gigatbit Ethernet

Microsoft office 2003 on CD HP2300 Laserjet printer

Computer configuration subject to change

Two licenses for Xcalibur Software

The Accela High Speed Pump is a quaternary low-pressure mixing solvent delivery system capable of flow rates from 0.1 to 1000 uL/min. Flow rate resolution is 0.1uL/min. This pump can delivers solvents at conventional LC pressures up to 15,000 psi. The Accela pump has the industry's lowest delay volume of 65uL. The pump has an integrated 4-channel vacuum degasser. The pump communication uses USB for real-time status monitoring. The Accela pump utilizes sub two micron particle technology to achieve fast, efficient chromatographic separations.

The Accela High Speed Autosampler provides automated sample introduction from multiple sample formats. It can accommodate 200 vials or three well plates 96 or 384, enabling up to 1152 samples at any given time. Isothermal injection and separation are provided by the integrated temperature controlled column and valve compartment that provide complete temperature control of the column and valve for superior separation efficiency and reproducibility. The integrated 3uL mobile phase pre-heater quickly and efficiently heats the mobile phase to the same temperature as the sample and column. The integrated sample cooler enables the samples waiting for analysis to be at a constant temperature removing the effects of ambient temperature fluctuations. The valve has been designed to handle the rigors of constant high pressure injections. A 1000mL wash bottle is also included for internally flushing and externally washing the injection needle.

Thirteen sample preparation functions are included for sample dilution, pre-column derivatization, liquid-liquid extraction, etc. The sample preparation

QUOTATION

Thermo Electron North America LLC
a subsidiary of Thermo Electron Corporation
Tel: 800-532-4752
FEIN: 43-1992201

No. 20104170 Page 3 / 6

Continuation of Quotation

Item	Quantity	Catalog Number/Description	Unit Price	Total Price
		steps can be combined in any order to create custom sample preparation methods. The sample injection cycle has been optimized for high throughput and is capable of achieving injection cycle times of less than 30 seconds.		
Includes; one-year warranty, installation, basic instrument operator training, and a comprehensive on-site TSQ Quantum Access training class.				
20	1EA	OPTON-20012 APCI PROBE FOR ION MAX	9,217.00 EA	9,217.00
		Customer Discount Net Value For Item		760.40- 8,456.60
30	1EA	OPTON-20753 TOXID 2.1.0 FOR XCALIBUR 2.0.7		
This is	a free item.			
40	2EA	60057-60070 COLUMN,HYPERSIL GOLD 50X2.1mm,1.9um,C18	606.00 EA	1,212.00
		Customer Discount Net Value For Item		99.99- 1,112.01
50	1EA	FREIGHT-DESTINATN FREIGHT CHARGES TO DESTINATION	800.00 EA	800.00
Final amount		USD 207,318.61		

QUOTATION

Thermo Electron North America LLC
a subsidiary of Thermo Electron Corporation
Tel: 800-532-4752
FEIN: 43-1992201

No. 20104170 Page 4 / 6

Continuation of Quotation

To place your order and expedite shipment, please fax your Purchase Order with all associated terms and conditions (and tax exemption certificate, if applicable) to FAX #561-688-8731, Attn: Sales Order Entry.

All purchase orders must show following Vendor information Thermo Electron North America LLC, 1400 North Pointe Parkway, Suite 50, West Palm Beach FL 33407

Please reference our quotation number on your purchase order and on any correspondence regarding the quotation.

Non-Thermo Electron North America LLC manufacturers may provide their own warranties to you.

SEE THE WARRANTY STATEMENT IN THE PRODUCT DOCUMENTATION FOR THE COMPLETE WARRANTY, AND THE WARRANTY AND EXCLUSIONS ON THE BACK OF THIS FORM.

Prices, warranty, installation and service on the items quoted herein are available only in the United States, and may not be otherwise assigned.

Buyer shall pay federal, state and local taxes in addition to the price stated on this order unless buyer gives Thermo Electron North America LLC a signed exemption certificate or direct pay permit. You may fax these documents to us. Your purchase order should also indicate the sales tax status of your order.

Buyer shall not export or re-export technical data or products supplied by Thermo Electron North America LLC in violation of applicable export regulations. Buyer who exports from the U.S. products purchased hereunder assumes all responsibility for obtaining any required export authorization and payment of applicable fees.

Vilne Delgado SIGNATURE



QUOTATION

Thermo Electron North America LLC a subsidiary of Thermo Electron Corporation Tel: 800-532-4752

FEIN: 43-1992201

No. 20104170 Page 5 / 6

Continuation of Quotation

TERMS AND CONDITIONS OF SALE

UNLESS OTHERWISE EXPRESSLY AGREED IN WRITING, ALL SALES ARE SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:

1.GENERAL. Thermo Electron North America LLC ("Seller") hereby offers for sale to the buyer named on the face hereof ("Buyer") the products listed on the face hereof (the "Products") on the express condition that Buyer agrees to accept and be bound by the terms and conditions set forth herein. Any provisions contained in any document issued by Buyer are expressly rejected and if the terms and conditions in this Agreement differ from the terms of Buyer#s offer, this document shall be construed as a counter offer and shall not be effective as an acceptance of Buyer#s document. Buyer#s receipt of Products or Seller#s commencement of the services provided hereunder will constitute Buyer#s acceptance of this Agreement. This is the complete and exclusive statement of the contract between Seller and Buyer with respect to Buyer's purchase of the Products. No waiver, consent, modification, amendment or change of the terms contained herein shall be binding unless in writing and signed by Seller and Buyer. Seller's failure to object to terms contained in any subsequent communication from Buyer will not be a waiver or modification of the terms set forth herein.All orders are subject to acceptance in writing by an authorized representative of Seller.

2. PRICE. All prices published by Seller or quoted by Seller's representatives may be changed at any time without notice. All prices quoted by Seller or Seller's representatives are valid for thirty (30) days, unless otherwise stated in writing. All prices for the Products will be as specified by Seller or, if no price has been specified or quoted, will be Seller's price in effect at the time of shipment. All prices are subject to adjustment on account of specifications, quantities, raw materials, cost of production, shipment arrangements or other terms or conditions which are not part of Seller's original price quotetion.

- 3. TAXES AND OTHER CHARGES. Prices for the Products exclude all sales, value added and other taxes and duties imposed with respect to the sate, delivery, or use of any Products covered hereby, all of which taxes and duties must by paid by Buyer. If Buyer claims any exemption, Buyer must provide a valid, signed certificate or letter of exemption for each respective jurisdiction.
- 4. TERMS OF PAYMENT. Seller may invoice Buyer upon shipment for the price and all other charges payable by Buyer in accordance with the terms on the face hereof. If no payment terms are stated on the face hereof, payment shall be not thirty (30) days from the date of invoice. If Buyer fails to pay any amounts when due, Buyer shall pay Seller interest thereon at a periodic rate of one and one-half percent (1.5%) per month (or, if tower, the highest rate permitted by law), together with all costs and expenses (including without limitation reasonable attorneys fees and disbursements and court costs) incurred by Seller in collecting such overdue amounts or otherwise enforcing Seller's rights hereunder. Seller reserves the right to require from Buyer full or partial payment in advance, or other security that is satisfactory to Seller, at any time that Seller believes in good faith that Buyer's financial condition does not justify the terms of payment specified. All payments shall be made in U.S. Dollars.
- 5. DELIVERY; CANCELLATION OR CHANGES BY BUYER. The Products will be shipped to the destination specified by Buyer, F.O.B. Seller's shipping point. Seller will have the right, at its election, to make partial shipments of the Products and to invoice each shipment separately. Seller reserves the right to stop delivery of Products in transit and to withhold shipments in whole or in part if Buyer falls to make any payment to Seller when due or otherwise fails to perform its obligations hereunder. All shipping dates are approximate only, and Seller will not be liable for any loss or damage resulting from any delay in delivery or failure to deliver which is due to any cause beyond Seller's reasonable control. In the event of a delay due to any cause beyond Seller's reasonable control. In the event of a delay due to any cause beyond Seller's reasonable control. In the event of a delay due to any cause beyond Seller's reasonable control. In the event of a delay due to any cause beyond Seller's exponded to the seller's exposed to the result of such delay due to any cause beyond Seller's exponded to the seller's exposed to the result of such delay. Products as to which delivery is delayed due to any cause within Buyer's control may be placed in storage by Seller at Buyer's result of such delay. Products as to which delivery is delayed due to any cause within Buyer's control may be placed in storage by Seller at Buyer's the and expense and for Buyer's account. Orders in process may be canceled only with Seller's written consent of Seller. Credit will not be allowed for Products returned without the prior written consent of Seller.
- 6. TITLE AND RISK OF LOSS. Notwithstanding the trade terms indicated above and subject to Seller's right to stop delivery of Products in transit, title to and risk of loss of the Products will pass to Buyer upon delivery of possession of the Products by Seller to the carrier; provided, however, that title to any software incorporated within or forming a part of the Products shall at all times remain with Seller or the licensor(s) thereof, as the case may be.
- 7. WARRANTY. Seller warrants that the Products will operate or perform substantially in conformance with Seller's published specifications and be free from defects in material and workmanship, when subjected to normal, proper and intended usage by properly trained personnel, for the period of time is not specified in Seller#s product documentation, published specifications or package inserts. If a period of time is not specified in Seller#s product documentation, published specifications or package inserts, the warranty period shall be one (1) year from the date of shipment to Buyer for equipment and ninety (90) days for all other products (the "Warranty Period"). Seller gives during the Warranty Period, to repair or replace, at Seller's option, defective Products so as to cause the same to operate in substantial conformance with said published specifications; provided that Buyer shall (a) promptly notify Seller in writing upon the discovery of any defect, which notice shall net product model and serial number (if applicable) and details of the warranty claim; and (b) after Seller#s review. Seller will provide Buyer with service data and/or a Return Material Authorization (#RMA#), which may include blohazard decontamination procedures and other product-specific handling instructions, then, if applicable, Buyer may return the defective Products to Seller with all costs prepaid by Buyer. Replacement parts may be new or refurbished, at the election of Seller. All replaced parts shall become the property of Seller. Shipment to Buyer or replacement Products shall be made in accordance with the Delivery provisions of the Seller#s Terms and Conditions of Sale. Consumables are expressly excluded from this warranty. Notwithstanding the foregoing, Products supplied by Seller that are obtained by Seller from an original manufacturer or third party supplier are not warranted by Seller, but Seller agrees to assign the product and products are supplied.

In no event shall Seller have any obligation to make repairs, replacements or corrections required, in whole or in part, as the result of (i) normal wear and tear, (ii) accident, disaster or event of force majeure, (iii) misuse, fault or negligence of or by Buyer, (iv) use of the Products in a manner for which they were not designed, (v) causes external to the Products such as, but not limited to, power failure or electrical power surges, (vi) improper storage and handling of the Products or (vii) use of the Products in combination with equipment or software not supplied by Seller. If Seller determines that Products for which Buyer has requested warranty services are not covered by the warranty hereunder, Buyer shall pay or reinburse Seller for all costs of investigating and responding to such request at Seller's then prevailing time and materials rates. If Seller provides repair services or replacement parts that are not covered by this warranty, Buyer shall pay be reinbursed by this warranty. Buyer shall pay seller therefor at Seller's then prevailing time and materials rates. ANY INSTALLATION, MINTENANCE, REPAIR, SERVICE, RELOCATION OR ALTERATION TO OR OF, OR OTHER TAMPERING WITH, THE PRODUCTS PERFORMED BY ANY PERSON OR ENTITY OTHER THAN SELLER WITHOUT SELLER'S PRIOR WRITTEN APPROVAL, OR ANY USE OF REPLACEMENT PARTS NOT SUPPLIED BY SELLER, SHALL IMMEDIATELY VOID AND CANCEL ALL WARRANTIES WITH RESPECT TO THE AFFECTED PRODUCTS.

THE OBLIGATIONS CREATED BY THIS WARRANTY STATEMENT TO REPAIR OR REPLACE A DEFECTIVE PRODUCT SHALL BE THE SOLE REMEDY OF BUYER IN THE EVENT OF A DEFECTIVE PRODUCT. EXCEPT AS EXPRESSLY PROVIDED IN THIS WARRANTY STATEMENT, SELLER DISCLAIMS ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, ORAL OR WRITTEN, WITH RESPECT TO THE PRODUCTS, INCLUDING WITHOUT LIMITATION ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. SELLER DOES NOT WARRANT THAT THE PRODUCTS ARE ERROR-FREE OR WILL ACCOMPLISH ANY PARTICULAR RESULT.

8. INDEMNIFICATION.

8.1 By Seller. Seller agrees to indemnify, defend and save Buyer, its officer, directors, and employees from and against any and all damages, liabilities, actions, causes of action, suits, claims, demands, losses, costs and expenses (including without limitation reasonable altorney#s fees) (#Indemnified Items#) for (i) injury to or death of persons or damage to property to the extent caused by the negligence or wilful misconduct of Seller, its employees, agents or representatives or contractors in connection with the performance of services at Buyer#s premises under this Agreement and (ii) claims that a Product infringes any valid United States patent, copyright or trade secret; provided, however, Seller shall have no liability under this Section to the extent any such indemnified Items are caused by either (i) the negligence or wilful misconduct of Buyer, its employees, agents or representatives or contractors, (ii) by any third party, (iii) use of a Product or orbination with equipment or software not supplied by Seller where the Product would not itself be infringing, (v) compliance with Buyer's designs, specifications or instructions, (v) use of the Product in an application or environment for which it was not designed or (vi) modifications of the Product by anyone other than Seller without Seller's prior written approval. Buyer shall provide Seller prompt written notice of any third party claim covered by Seller#s indemnification or beligations hereunder. Seller shall have the right to assume exclusive control of the defense of such claim or, at the option of the Seller, to settle the same. Buyer agrees to cooperate reasonably with Seller in connection with the performance by Seller of its obligations in this Section.

Notwithstanding the above, Seller#s infringement related indemnification obligations shall be extinguished and relieved if Seller, at its discretion and at its own expense (a) procures for Buyer the right, at no additional expense to Buyer, to continue using the Product; (b) replaces or modifies the Product so that it becomes non-infringing, provided the modifications or replacement does not adversely affect the specifications of the Product; or (c) in the event (a) and (b) are not practical, refund to Buyer the amortized amounts paid by Buyer with respect thereto, based on a five (5) year amortization schedule. THE FOREGOING INDEMNIFICATION PROVISION STATES SELLER'S ENTIRE LIABILITY TO BUYER FOR THE CLAIMS DESCRIBED HEREIN.

QUOTATION

Thermo Electron North America LLC a subsidiary of Thermo Electron Corporation

Tel: 800-532-4752 FEIN: 43-1992201

No. 20104170 Page 6/ 6

Continuation of Quotation

8.2 By Buyer. Buyer shall indemnify, defend with competent and experienced counsel and hold harmless Seller, its parent, subsidiaries, affiliates and divisions, and their respective officers, directors, shareholders and employees, from and against any and all damages, liabilities, actions, causes of action, suits, claims, demands,losses, costs and expenses (including without limitation teasonable attorneys' fees and disbursements and court costs) to the extent arisingfrom or in connection with (i) the negligence or willful misconduct of Buyer, its agents, employees, representatives or contractors; (ii) use of a Product in combination with equipment or software not supplied by Seller where the Product itself would not be infringing; (iii) Seller's compliance with designs, specifications or instructions supplied to Seller by Buyer; (iv) use of a Product in an application or environment for which it was not designed; or (v) modifications of a Product by anyone other than Seller without Seller's prior written approval.

9. SOFTWARE. With respect to any software products incorporated in or forming a part of the Products hereunder, Seller and Buyer intend and agree that such software products are being ficensed and not sold, and that the words "purchase", "sell" or similar or derivative words are understood and agreed to mean "licenses", and that the word "Buyer" or similar or derivative words are understood and agreed to mean "licenses". Notwithstanding anything to the contrary contained herein, Seller or its licensor, as the case may be, retains all rights and interest in software products provided hereunder.

Seller hereby grants to Buyer a royalty-free, non-exclusive, nontransferable license, without power to sublicense, to use software provided hereunder solely for Buyer's own internal business purposes on the hardware products provided hereunder ceases, unless earlier terminated as provided herein. Buyer agrees to hold in confidence and not to sell, transfer, license, toan or otherwise make available in any form to third parties the software products and reducts documentation provided hereunder. Buyer may not disassemble, decompile or reverse engineer, copy, modify, enhance or otherwise change or supplement the software products provided hereunder without Seller's prior written consent. Seller will be entitled to terminate this license if Buyer fails to comply with any term or condition herein. Buyer agrees, upon termination of this license, immediately to return to Seller all software products and related documentation provided hereunder and all copies and portions thereof.

erfain of the software products provided by Seller may be owned by one or more third parties and licensed to Seller. Accordingly, Seller and Buyer agree that such third parties retain ownership f and title to such software products. The warranty and indemnification provisions set forth herein shall not apply to software products owned by third parties and provided hereunder.

10. LIMITATION OF LIABILITY. NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED HEREIN, THE LIABILITY OF SELLER UNDER THESE TERMS AND CONDITIONS (WHETHER BY REASON OF BREACH OF CONTRACT, TORT, INDEMNIFICATION, OR OTHERWISE, BUT EXCLUDING LIABILITY OF SELLER FOR BREACH OF WARRANTY (THE SOLE REMEDY FOR WHICH SHALL BE AS PROVIDED UNDER SECTION 7. ABOVE) SHALL NOT EXCEED AN AMOUNT EQUAL TO THE LESSER OF (A) THE TOTAL PURCHASE PICE THERETOFORE PAID BY BUYER TO SELLER WITH RESPECT TO THE PRODUCT(S) GIVING RISE TO SUCH LIABILITY OR (B) ONE MILLION DOLLARS (\$1,000,000), NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED HEREIN, IN NO EVENT SHALL SELLER BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES (INCLUDING WITHOUT LIMITATION DAMAGES FOR LOSS OF FACILITIES OR EQUIPMENT, LOSS OF REVENUE, LOSS OF DATA, LOSS OF PROFITS OR LOSS OF GOODWILL), REGARDLESS OF WHETHER SELLER (a) HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES OR (b) IS NEGLIGENT.

11. EXPORT RESTRICTIONS. Buyer acknowledges that each Product and any related software and technology, including technical information supplied by Seller or contained in documents (collectively #ltems#), is subject to export controls of the U.S. government. The export controls may include, but are not limited to, those of the Export Administration Regulations of the U.S. Department of Commerce (the #EAR#), which may restrict or require licenses for the export of Items from the United States and their re-export from other countries. Buyer shall comply with the EAR and all other applicable laws, regulations, laws, treaties, and agreements relating to the export, re-export, and import of any Item. Buyer shall not, without first obtaining the required license to do so from the appropriate U.S. government agency; (i) export or re-export any Item, or (ii) export, re-export, distribute or supply any Item to any restricted or embargoed country or to a person or entity whose privilege to participate in exports has been denied or restricted by the U.S. government. Buyer shall cooperate fully with Seller in any official or unofficial audit or inspection related to applicable export or import control laws or regulations, and shall indemnify and hold Seller harmless from, or in connection with, any violation of this Section by Buyer or its employees, consultants, agents, or customers.

12. MISCELLANEOUS. (a) Buyer may not delegate any duties nor assign any rights or claims hereunder without Seller's prior written consent, and any such attempted delegation or assignment shall be void. (b) The rights and obligations of the parties hereunder shall be governed by and construed in accordance with the taws of the State of Seller#s manufacturing location, in any action arising out of or relating to this Agreement and waives any other venue to which it may be entitled by domicile or otherwise. (c) In the event of any legalproceeding between the Seller and Buyer relating to this Agreement and waives any other venue to which it may be entitled by domicile or otherwise. (c) In the event of any otherwise to a right to a triat by jury. Any action arising under this Agreement must be brought within one (1) year from the date that the cause of action arose. (d) The application to this Agreement of the U.N. Convention on Contracts for the International Sale of Goods is hereby expressly excluded. (e) In the event that any one or more provisions contained herein shall be held by a court of competent jurisdiction to be invalid, lilegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall be held by a court of competent jurisdiction to be invalid, lilegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall remainin full force and effect, unless the revision materially changes the bargain. (f) Seller's failure to enforce, or Seller's waiver of a breach of, any provision contained herein shall not constitute a waiver of any other purpose, including without limitation, unauthorized commercial uses in vitro degenostic uses, or vitro or in vivo therapeutic uses, or any type of consumption by or application to be used for any other purpose, including without limitation, unauthorized commercial uses in vitro degenostic uses, or vitro or in vivo therapeutic uses, or any type

T&C Doc.#110672v3 (Revised 9/14/2007)

QUOTATION

Thermo Electron North America LLC a subsidiary of Thermo Electron Corporation

Tel: 800-532-4752 FEIN: 43-1992201

Submitted to:

STATE OF WEST VIRGINIA DEPT OF ADMINISTRATION PURCHASING DIVISION RFQ NO. CME90068 2019 WASHINGTON STREET, EAST CHARLESTON WV 25311 Quote Number: 20104180

Quote Date: 01/16/2009 Contact Name: ROBERTA WAGNER

Telephone No: 304-558-0067 Fax No: 304-558-4115

Validity From: 01/16/2009 To: 03/19/2009

Page	Shipment	F.O.B	Terms
1/5	60-90 Days ARO	DEST. PREPAY & ADD	NET 30 DAYS UPON INVOICE DATE (Payment Terms Subject to Credit Approval)

SALES REP: GIOVANNI PALLANTE/vd

EMAIL: giovanni.pallante@thermofisher.com

REF: RFQ NO. CME90068

Item	Quantity	Catalog Number/Description	Unit Price	Total Price	
10	1EA	EXACT-12000 Exactive+Accela bundle with Pathfinder	329,560.00 EA	329,560.00	
		Material Net Value For Item EXACTIVE+ ACCELA BUNDLE WITH PATHFINDER		95,560.00- 234,000.00	
20	1EA	222-223900 POWERVAR PWR COND 95250-53R-6kVA 1 PHS	4,000.00 EA	4,000.00	
		Customer Discount Net Value For Item Powervar Pwr Cond 95250-53R - 6kVA 1 Phs		330.00- 3,670.00	
	~ Power Condition for Finnigan DELTA V Advantage, DELTA V Plus, DELTA plus XP, DELTA Plus Advantage, DELTA S, DELTA C, DELTA E; DELTA Adv IRMS ~ Power requirements: Single Phase 6.0 kVA, 230V L-N				
30	1EA	OPTON-20012 APCI PROBE FOR ION MAX	9,217.00 EA	9,217.00	
		Customer Discount Net Value For Item		760.40- 8,456.60	

QUOTATION

Thermo Electron North America LLC a subsidiary of Thermo Electron Corporation Tel: 800-532-4752 FEIN: 43-1992201

No. 20104180 Page 2 / 5

Continuation of Quotation

Item	Quantity	Catalog Number/Description	Unit Price	Total Price
40	1EA	702-012700 EXACTIVE OPS ON-SITE TRAINING - 4 DAYS	12,492.00 EA	12,492.00
		Customer Discount Net Value For Item EXACTIVE OPERATIONS ON-SITE TRAINING EXACTIVE OPERATIONS TRAINING DELIVERED AT THE days)	CLIENT'S SITE (4	1,030.59- 11,461.41
50	1EA	OPTON-20753 TOXID 2.1.0 FOR XCALIBUR 2.0.7		
This is	a free item.			
60	2EA	60057-60070 COLUMN,HYPERSIL GOLD 50X2.1mm,1.9um,C18	606.00 EA	1,212.00
		Customer Discount Net Value For Item		99.99- 1,112.01
70	1EA	FREIGHT-DESTINATN FREIGHT CHARGES TO DESTINATION	800.00 EA	800.00

Final amount USD 259,500.02

QUOTATION

Thermo Electron North America LLC a subsidiary of Thermo Electron Corporation Tel: 800-532-4752 FEIN: 43-1992201

No. 20104180 Page 3 / 5

Continuation of Quotation

To place your order and expedite shipment, please fax your Purchase Order with all associated terms and conditions (and tax exemption certificate, if applicable) to FAX #561-688-8731, Attn: Sales Order Entry.

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Non-Thermo Electron North America LLC manufacturers may provide their own warranties to you.

SEE THE WARRANTY STATEMENT IN THE PRODUCT DOCUMENTATION FOR THE COMPLETE WARRANTY, AND THE WARRANTY AND EXCLUSIONS ON THE BACK OF THIS FORM.

Prices, warranty, installation and service on the items quoted herein are available only in the United States, and may not be otherwise assigned.

Buyer shall pay federal, state and local taxes in addition to the price stated on this order unless buyer gives Thermo Electron North America LLC a signed exemption certificate or direct pay permit. You may fax these documents to us. Your purchase order should also indicate the sales tax status of your order.

Buyer shall not export or re-export technical data or products supplied by Thermo Electron North America LLC in violation of applicable export regulations. Buyer who exports from the U.S. products purchased hereunder assumes all responsibility for obtaining any required export authorization and payment of applicable fees.

Vilner Wilcook SIGNATURE



QUOTATION

Thermo Electron North America LLC a subsidiary of Thermo Electron Corporation Tel: 800-532-4752

FEIN: 43-1992201

No. 20104180 Page 4 / 5

Continuation of Quotation

TERMS AND CONDITIONS OF SALE

UNLESS OTHERWISE EXPRESSLY AGREED IN WRITING, ALL SALES ARE SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:

1.GENERAL. Thermo Electron North America LLC ("Seller") hereby offers for sale to the buyer named on the face hereof ("Buyer") the products listed on the face hereof (the "Products") on the express condition that Buyer agrees to accept and be bound by the terms and conditions set forth herein. Any provisions contained in any document issued by Buyer are expressly rejected and if the terms and conditions in this Agreement differ from the terms of Buyer#s offer, this document shall be construed as a counter offer and shall not be effective as an acceptance of Buyer#s document. Buyer#s receipt of Products or Seller#s commencement of the services provided hereunder will constitute Buyer#s acceptance of this Agreement. This is the complete and exclusive statement of the contract between Seller and Buyer with respect to Buyer's purchase of the Products. No waiver, consent, modification, amendment or change of the terms contained herein shall be binding unless in writing and signed by Seller and Buyer. Seller's failure to object to terms contained in any subsequent communication from Buyer will not be a waiver or modification of the terms set forth herein.All orders are subject to acceptance in writing by an authorized representative of Seller.

- 2. PRICE. All prices published by Seller or quoted by Seller's representatives may be changed at any time without notice. All prices quoted by Seller or Seller's representatives are valid for thirty (30) days, unless otherwise stated in writing. All prices for the Products will be as specified by Seller or, if no price has been specified or quoted, will be Seller's price in effect at the time of shipment. All prices are subject to adjustment on account of specifications, quantities, raw materials, cost of production, shipment arrangements or other terms or conditions which are not part of Seller's original price quotation.
- 3. TAXES AND OTHER CHARGES. Prices for the Products exclude all sales, value added and other taxes and duties imposed with respect to the sale, delivery, or use of any Products covered hereby, all of which taxes and duties must by paid by Buyer. If Buyer claims any exemption, Buyer must provide a valid, signed certificate or letter of exemption for each respective jurisdiction.
- 4. TERMS OF PAYMENT. Seller may invoice Buyer upon shipment for the price and all other charges payable by Buyer in accordance with the terms on the face hereof. If no payment terms are stated on the face hereof, payment shall be not thirty (30) days from the date of invoice. If Buyer fails to pay any amounts when due, Buyer shall pay Seller interest thereon at a periodic rate of one and one-half percent (1.5%) per month (or, if lower, the highest rate permitted by law), together with all costs and expenses (including without limitation reasonable attorneys' fees and disbursements and court costs) incurred by Seller in collecting such overdue amounts or otherwise enforcing Seller's rights hereunder. Seller reserves the right to require from Buyer full or partial payment in advance, or other security that is satisfactory to Seller, at any time that Seller believes in good faith that Buyer's financial condition does not justify the terms of payment specified. All payments shall be made in U.S. Dollars.
- 5. DELIVERY; CANCELLATION OR CHANGES 8Y BUYER. The Products will be shipped to the destination specified by Buyer, F.O.B. Seller's shipping point. Seller will have the right, at its election, to make partial shipments of the Products and to invoice each shipment separately. Seller reserves the right to stop delivery of Products in transit and to withhold shipments in whole or in part if Buyer fails to make any payment to Seller when due or otherwise fails to perform its obligations hereunder. All shipping dates are approximate only, and Seller will not be liable for any loss or damage resulting from any delay in delivery or failure to deliver which is due to any cause beyond Seller's reasonable control. In the event of a delay due to any cause beyond Seller's reasonable control, Seller reserves the right to terminate the order or to reschedule the shipment within a reasonable period of time, and Buyer will not be entitled to refuse delivery or otherwise be relieved of any obligations as the result of such delay. Products as to which delivery is delayed due to any cause within Buyer's control may be placed in storage by Seller at Buyer's risk and expense and for Buyer's account. Orders in process may be canceled only with Seller's written consent and upon payment of Seller's cancellation charges. Orders in process may not be changed except with Seller's written consent and upon agreement by the parties as to an appropriate adjustment in the purchase price therefor. Credit will not be allowed for Products returned without the prior written consent of Seller.
- 6. TITLE AND RISK OF LOSS. Notwithstanding the trade terms indicated above and subject to Seller's right to stop delivery of Products in transit, title to and risk of loss of the Products will pass to Buyer upon delivery of possession of the Products by Seller to the carrier; provided, however, that title to any software incorporated within or forming a part of the Products shall at all limes remain with Seller or the licensor(s) thereof, as the case may be.
- 7. WARRANTY. Seller warrants that the Products will operate or perform substantially in conformance with Seller's published specifications and be free from defects in material and workmanship, when subjected to normal, proper and intended usage by properly trained personnel, for the period of time is not specified in Seller#s product documentation, published specifications or package inserts. If a period of time is not specified in Seller#s product documentation, published specifications or package inserts, the warranty period shall be one (1) year from the date of shipment to Buyer for equipment and ninety (90) days for all other products (the "Warranty Period"). Seller grees during the Warranty Period, or pear or replair or replair or specifications or package inserts, the warranty period shall be one (1) year from the date of shipment to Buyer for equipment and ninety (90) days for all other products one so cause the same to operate in substantial conformance with said published specifications; provided that Buyer shall (a) promptly notify Seller in writing upon the discovery of any defect, which notice shall be product model and serial number (if applicable) and details of the warranty claim; and (b) after Seller#s review. Seller will provide Buyer with service data and/or a Return Material Authorization (#RMA#), which may include biohazard decontamination procedures and other product-specific handling instructions, then, if applicable, Buyer may return the defective Products to Seller with all costs prepaid by Buyer. Replacement parts may be new or refurbished, at the election of Seller. All replaced parts shall be come the property of Seller. Shipment to Buyer replacement Products shall be made in accordance with the Delivery provisions of the Seller#s Terms and Conditions of Sale. Consumables are expressly excluded from this warranty. Notwithstanding the foregoing, Products supplied by Seller that are obtained by Seller from an original manufacturer or third party supplier, to the extent such assignment

In no event shall Seller have any obligation to make repairs, replacements or corrections required, in whote or in part, as the result of (I) normal wear and tear, (ii) accident, disaster or event of force majeure, (iii) misuse, fault or negligence of or by Buyer, (iv) use of the Products in a manner for which they were not designed, (v) causes external to the Products such as, but not limited to, power failure or electrical power surges, (vi) improper storage and handling of the Products or (vii) use of the Products in combination with equipment or software not supplied by Seller. If Seller determines that Products for which Buyer has requested warranty services are not overed by the warranty hereunder, Buyer shall pay or reimburse Seller for all costs of investigating and responding to such request at Seller's then prevailing time and materials rates. If Seller provides repair services or replacement parts that are not covered by this warranty, Buyer shall pay Seller therefor at Seller's then prevailing time and materials rates. ANY INSTALLATION, MAINTENANCE, REPAIR, SERVICE, RELOCATION OR ALTERATION TO OR OF, OR OTHER TAMPERING WITH, THE PRODUCTS PERFORMED BY ANY PERSON OR ENTITY OTHER THAN SELLER WITHOUT SELLER'S PRIOR WRITTEN APPROVAL, OR ANY USE OF REPLACEMENT PARTS NOT SUPPLIED BY SELLER, SHALL IMMEDIATELY VOID AND CANCEL ALL WARRANTIES WITH RESPECT TO THE AFFECTED PRODUCTS.

THE OBLIGATIONS CREATED BY THIS WARRANTY STATEMENT TO REPAIR OR REPLACE A DEFECTIVE PRODUCT SHALL BE THE SOLE REMEDY OF BUYER IN THE EVENT OF A DEFECTIVE PRODUCT. EXCEPT AS EXPRESSLY PROVIDED IN THIS WARRANTY STATEMENT, SELLER DISCLAIMS ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, ORAL OR WRITTEN, WITH RESPECT TO THE PRODUCTS, INCLUDING WITHOUT LIMITATION ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. SELLER DOES NOT WARRANT THAT THE PRODUCTS ARE ERROR-FREE OR WILL ACCOMPLISH ANY PARTICULAR RESULT.

8. INDEMNIFICATION

8.1 By Sallor. Saller agrees to indemnify, defend and save Buyer, its officer, directors, and employees from and against any and all damages, liabilities, actions, causes of action, suits, claims, demands, losses, costs and expenses (including without limitation reasonable attorney#s fees) (#Indemnified Items#) for (i) injury to or death of persons or damage to properly to the extent caused by the negligence or willid misconduct of Seller, its employees, agents or representatives or contractors in connection with the performance of services at Buyer#s premises under this Agreement and (ii) claims that a Product Infringes any valid United States patent, copyright or trade secret; provided, however, Seller shall have no liability under this Section to the extent any such Indemnified Items are caused by either (i) the negligence or willful misconduct of Buyer, its employees, agents or representatives or contractors, (ii) by any third party, (iii) use of a Product in origination with equipment or software not supplied by Seller where the Product would not itself be infinging, (iv) compliance with Buyer's designs, specifications or instructions, (v) use of the Product in an application or environment for which it was not designed or (vi) modifications of the Product by anyone other than Seller without Seller's prior written approval. Buyer shall provide Seller prompt written notice of any third party claim covered by Seller#s indemnification obligations hereunder. Seller shall have the right to assume exclusive control of the defense of such claim or, at the option of the Seller, to settle the same. Buyer agrees to cooperate reasonably with Seller in connection with the performance by Seller of its obligations in this Section.

Notwithstanding the above, Seller#s infringement related indemnification obligations shall be extinguished and relieved if Seller, at its discretion and at its own expense (a) procures for Buyer the right, at no additional expense to Buyer, to continue using the Product; (b) replaces or modifies the Product so that it becomes non-infringing, provided the modification or replacement does not adversely affect the specifications of the Product; or (c) in the event (a) and (b) are not practical, refund to Buyer the amortized amounts paid by Buyer with respect thereto, based on a five (5) year amortization schedule. THE FOREGOING INDEMNIFICATION PROVISION STATES SELLER'S ENTIRE LIABILITY TO BUYER FOR THE CLAIMS DESCRIBED HEREIN.

ELECTRON CORPORATION

QUOTATION

Thermo Flectron North America LLC a subsidiary of Thermo Electron Corporation Tel: 800-532-4752

FEIN: 43-1992201

No. 20104180 Page 5 / 5

Continuation of Quotation

8.2 By Buyer. Buyer shall indemnify, defend with competent and experienced counsel and hold harmless Seller, its parent, subsidiaries, affiliates and divisions, and their respective officers, directors, shareholders and employees, from and against any and all damages, liabilities, actions, causes of action, suits, claims, demands, losses, costs and expenses (including without limitation reasonable attorneys' fees and disbursements and court costs) to the extent arisingfrom or in connection with (i) the negligence or willful misconduct of Buyer, its agents, employees, representatives or contractors; (ii) use of a Product in combination with equipment or software not supplied by Seller where the Product itself would not be infringing; (iii) Seller's compliance with designs, specifications or instructions supplied to Seller by Buyer; (iv) use of a Product in an application or environment for which it was not designed; or (v) modifications of a Product by anyone other than Seller without Seller's prior written approval.

9. SOFTWARE. With respect to any software products incorporated in or forming a part of the Products hereunder, Seller and Buyer intend and agree that such software products are being licensed and not sold, and that the words "purchase", "sell" or similar or derivative words are understood and agreed to mean "licenses", and that the word "Buyer" or similar or derivative words are understood and agreed to mean "licenses". Notwithstanding anything to the contrary contained herein, Seller or its licensor, as the case may be, retains all rights and interest in software products provided hereunder.

Seller hereby grants to Buyer a royalty-free, non-exclusive, nontransferable license, without power to sublicense, to use software provided hereunder solely for Buyer's own internal business purposes. This license terminates when Buyer's lawful possession of the hardware products provided hereunder cases, unless earlier terminated as provided herein. Buyer agrees to hold in confidence and to to sell, transfer, license, loan or otherwise make available in any form to third parties the software products and related documentation provided hereunder. Buyer may not disassemble, decompile or reverse engineer, copy, modify, enhance or otherwise change or supplement the software products provided hereunder without Seller's prior written consent. Seller will be entitled to terminate this license if Buyer fails to comply with any term or condition herein. Buyer agrees, upon termination of this license, immediately to return to Seller all software products and related documentation provided hereunder and all copies and portions thereof.

Certain of the software products provided by Seller may be owned by one or more third parties and licensed to Seller. Accordingly, Seller and Buyer agree that such third parties retain ownership of and fille to such software products. The warranty and indemnification provisions set forth herein shall not apply to software products owned by third parties and provided hereunder.

10. LIMITATION OF LIABILITY. NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED HEREIN, THE LIABILITY OF SELLER UNDER THESE TERMS AND CONDITIONS (WHETHER BY REASON OF BREACH OF CONTRACT, TORT, INDEMNIFICATION, OR OTHERWISE, BUT EXCLUDING LIABILITY OF SELLER FOR BREACH OF WARRANTY (THE SOLE REMEDY FOR WHICH SHALL BE AS PROVIDED UNDER SECTION 7 ABOVE) SHALL NOT EXCEED AN AMOUNT EQUAL TO THE LESSER OF (A) THE TOTAL PURCHASE PRICE THERETOFORE PAID BY BUYER TO SELLER WITH RESPECT TO THE PRODUCT(S) GIVING RISE TO SUCH LIABILITY OR (B) ONE MILLION DOLLARS (51,000,000). NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED HEREIN, IN NO EVENT SHALL SELLER BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES (INCLUDING WITHOUT LIMITATION DAMAGES FOR LOSS OF FACILITIES OR EQUIPMENT, LOSS OF REVENUE, LOSS OF DATA, LOSS OF PROFITS OR LOSS OF GOODWILL), REGARDLESS OF WHETHER SELLER (a) HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES OR (b) IS NEGLIGENT.

11. EXPORT RESTRICTIONS. Buyer acknowledges that each Product and any related software and technology, including technical information supplied by Seller or contained in documents (collectively #items#), is subject to export controls of the U.S. government. The export controls may include, but are not limited to, those of the Export Administration Regulations of the U.S. Department of Commerce (the #EAR#), which may restrict or require licenses for the export for them the United States and their re-export from other countries. Buyer shall not, without first obtaining the required license to do so from the appropriate U.S. government agency; (i) export or re-export any Item, or (ii) export, re-export, distribute or supply any Item to any restricted or embargoet country or to a person or entity whose privilege to participate in exports has been denied or restricted by the U.S. government. Buyer shall cooperate fully with Seller in any official or unofficial auditor inspection related to applicable export or import control laws or regulations, and shall indemnify and hold Seller harmless from, or in connection with, any violation of this Section by Buyer or its employees, consultants, agents, or customers.

12. MISCELLANEOUS. (a) Buyer may not delegate any duties nor assign any rights or claims heraunder without Seller's prior written consent, and any such attempted delegation or assignment shall be void. (b) The rights and obligations of the parties hereunder shall be governed by and construed in accordance with the laws of the State of Seller#s manufacturing location, without reference to its choice of law provisions. Each party hereby irrevocably consents to the exclusive jurisdiction of the state and federal courts located in the county and state of Seller#s manufacturing location, in any action arising out of or relating to this Agreement and waives any other venue to which it may be entitled by domicile or otherwise. (c) In the event of any legalproceeding between the Seller and Buyer relating to this Agreement, neither party may claim the right to a trial by jury, and both parties waive any right they may have under applicable law or otherwise to a right to a trial by jury. Any action arising under this Agreement must be brought within one (1) year from the date that the cause of action arose. (d) The application to this Agreement of the U.N. Convention on Contracts for the International Sale of Goods is hereby expressly excluded. (e) In the event that any one or more provisions contained herein shall be held by a court of competent jurisdiction to be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall be held by a court of competent jurisdiction to be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provision contained herein shall remained feders, unless the revision materially changes the bargain. (f) Seller's failure to enforce, or Seller's waiver of a breach of, any provision contained herein shall remained for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial usein vitro diagnostic uses, ex

T&C Doc.#110672v3 (Revised 9/14/2007)

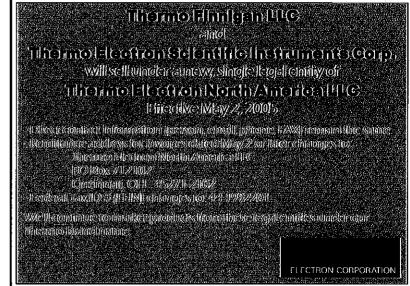
Dear Colleague;

Thermo continues to reorganize around the way you, our customer, does business. Many customers buy combinations of our leading Thermo brand mass spectrometry, elemental analysis, molecular spectroscopy and chromatography offerings, and have asked for the ability to buy those products from a single entity.

We're working hard to deliver by combining two of our largest legal entities – this means that the many customers who interact with both entities today will more conveniently be able to deal with us as a single supplier.

On May 2, 2005, our spectroscopy, chromatography, mass spectrometry

instrumentation and service businesses will effectively interact with you through one, new legal name: Thermo Electron North America LLC.



You can still find us as at the same email address and telephone number as before – but the supplier entities, remittance address, and Federal Tax ID you've used for purchasing will become one. Instead of:

- Thermo Finnigan LLC with Federal Tax ID 04-3535157, and
- Thermo Electron Scientific Instruments Corporation with Federal Tax ID 39-1085016

 Thermo Electron North America II Children Tay ID 43 4003304 and conditional actions in the conditions in the conditional actions in the conditions n the conditions in the conditions in the conditions in the c

You'll use Thermo Electron North America LLC with Federal Tax ID 43-1992201 and send invoices to the address indicated in the gray box above.

Please take the time to update this key information about us in your supplier database, and ensure that your Finance department updates your purchasing and accounts payable systems.

We'll continue working on changes like this one to make it easier for you to do business with us, and apologize for any inconvenience. We remain dedicated to providing you with state-of-the-art scientific solutions and technological expertise. If you have any questions, please contact us at 1-800-532-4752. We'll be happy to work with you and your organization as need be to facilitate this change.

Sincerely,

Greg Herrema
President, Scientific Instruments

(Rev. September 2007) Department of the Treasury

Request for Taxpayer **Identification Number and Certification**

Give form to the requester. Do not

****	ALANDO GRAIGO	send to the IRS.
	Name (as shown on your income tax return) Name (as shown on your income tax return)	
	Thermo Electron North America, LLC Business name, if different from above	
	G and a supplier from 900A8	
	5	
ē.	Check appropriate box: Individual/Sole proprietor Corporation Partnership	
£.	X Limited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=partnership)	D Exempt
·	Other (see instructions)	L.J payee
Ē:	Address (number, street, and apt. or suite no.) Requester's n	ame and address (optional)
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Print or type	West Palm Beach, FL 33407	
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NO	ite. If the account is in more than one name, see the chart or need 4 for suitable .	ployer identification number
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	Men Certification	
Und	der penalties of perjury, I certify that:	
1.	The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be a subject to be a number to be	se issued to mo) and
	Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or discount in the subject to backup withholding, and	vidends, or (c) the IRS has
3.	I am a U.S. citizen or other U.S. person (defined below).	
	rtification instructions. You must cross out item 2 above if you have been notified by the IRS that you are give	ummah, a. d. t

Certification instructions. You must cross out item 2 above if you have been notified by the IHS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tex return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. See the instructions on page 4.

Sign Here

Signature of U.S. person ▶

Date >

8/6/2008

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage Interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

- 1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
 - 2. Certify that you are not subject to backup withholding, or
- 3. Claim exemption from backup withholding if you are a U.S. exempt payes. If applicable, you are also certifying that as a U.S. person, your allocable share of any parinership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- · An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States.
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301,7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

The U.S. owner of a disregarded entity and not the entity,

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FEB. 3. 2009 3:37PM

WY DIV OF PURCH

NO. 5603 P. 7

03-02-2009



State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WW 25305-0130

Request for

CME90068

NAMES AND A STORY

ROBERTA WAGNER 304-558-0067

REQ COPY TYPE NAME/ADDRESS HERE Thermo Electron North America LLC 1400 Northpoint Pkwy, Ste 50 West Palm Beach, FL 33407

HEALTH AND HUMAN RESOURCES VARIOUS LOCALES AS INDICATED BY ORDER

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NO. 5603 P. 9



State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 26305-0130

Request for

CME90068

ROBERTA WAGNER 304-558-0067

RFQ COPY TYPE NAME/ADDRESS HERE

Thermo Electron North America LLC 1400 Northpoint Pkwy, Ste 50 West Palm Beach, FL 33407

HEALTH AND HUMAN RESOURCES VARIOUS LOCALES AS INDICATED by order

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3/12

FEB. 3.2009 3:37PM WY DIV OF PURCH

NO, 5603 P. 8

GENERAL TERMS & CONDITIONS REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)

- 1. Awards will be made in the best interest of the State of West Virginia.
- 2. The State may accept or reject in part, or in whole, any bid.
- 3. All quotations are governed by the West Virginia Code and the Legislative Rules of the Purchasing Division.
- 4. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125 fee.
- 5. All services performed or goods delivered under State Purchase Order/Contracts are to be continued for the term of the Purchase Order/Contracts, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods, this Purchase Order/Contract becomes void and of no effect after June 30.
- 6. Payment may only be made after the delivery and acceptance of goods or services.
- Interest may be paid for late payment in accordance with the West Virginia Code.
- 8. Vandor preference will be granted upon written request in accordance with the West Virginia Code.
- 9. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
- 10. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
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- 13. BANKRUPTCY: In the event the vendor/contractor files for bankruptcy protection, this Contract may be deemed null and vold, and terminated without further order.
- 14. HIPAA BUSINESS ASSOCIATE ADDENDUM: The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, and available online at the Purchasing Division's web sits (http://www.state.wv.us/admin/purchase/vro/hipaa.htm) is hereby made part of the agreement. Provided that, the Agency meets the definition of a Cover Entity (45 OFR §180,103) and will be disclosing Protected Health Information (45 CFR §160.103) to the vendor.
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INSTRUCTIONS TO BIDDERS

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FEB. 3. 2009 3:36PM WV DIV OF PURCH

NO. 5603 P. 4



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State of West Virginia
Department of Administration

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

Request for

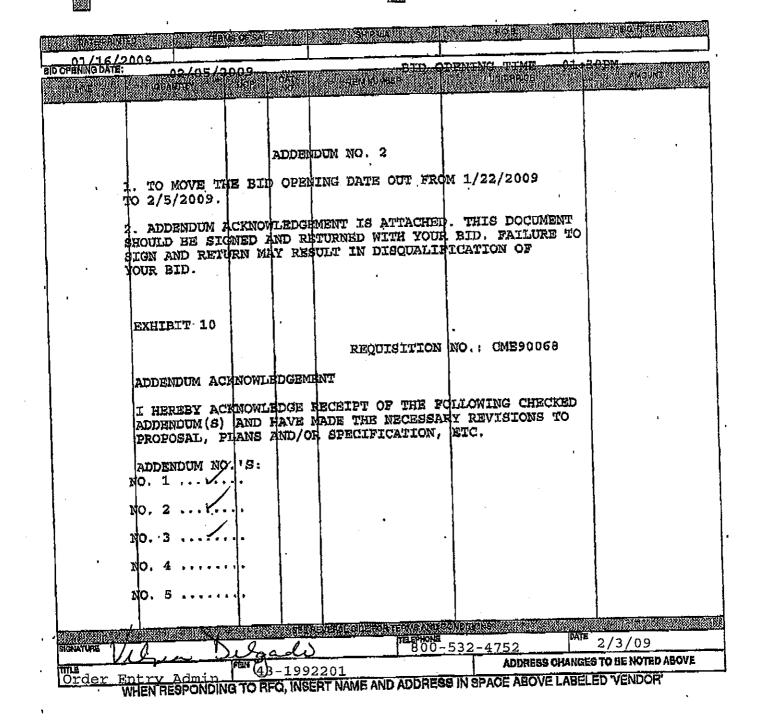
CME90068

ROBERTA WAGNER 104-558-0057

HEALTH AND HUMAN RESOURCES VARIOUS LOCALES AS INDICATED BY ORDER

RFO COPY TYPE NAME/ADDRESS HERE

Thermo Electron North America LLC 1400 Northpoint Pkwy, Ste 50 West Palm Beach, FL 33407



5/12

Line 1

FEB. 3. 2009 3:36PM WY DIV OF PURCH

NO. 5603 P. 6



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

Request for

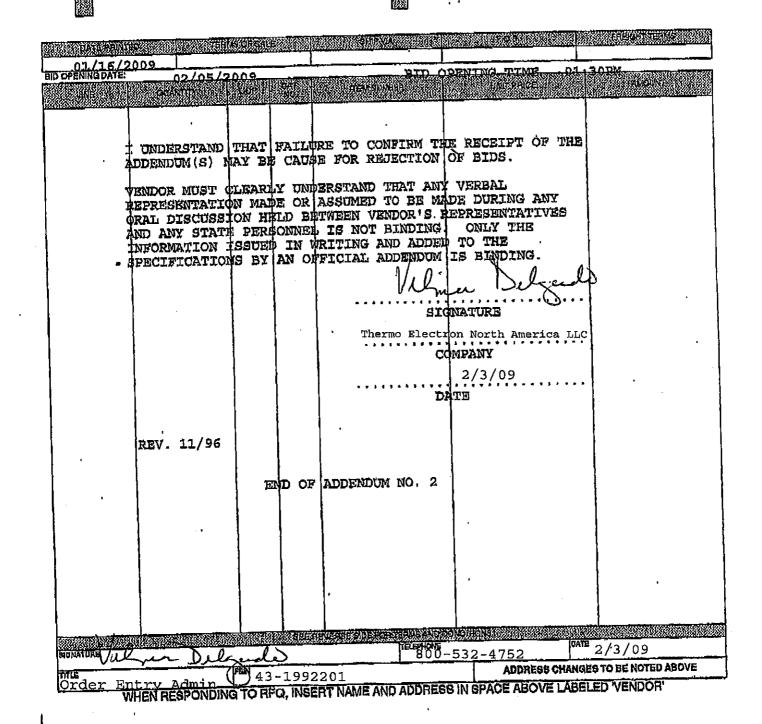
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ROBERTA WAGNER 104-558-0067

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HEALTH AND HUMAN RESOURCES VARIOUS LOCALES AS INDICATED BY ORDER

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NO. 5603 P. 5 6/12

GENERAL TERMS & CONDITIONS REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)

- 1. Awards will be made in the best interest of the State of West Virginia.
- 2. The State may accept or reject in part, or in whole, any bid.
- 3. All quotations are governed by the West Virginia Code and the Legislative Rules of the Purchasing Division.
- 4. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125 fee.
- 5. All services performed or goods delivered under State Purchase Order/Contracts are to be continued for the term of the Purchase Order/Contracts, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods, this Purchase Order/Contract becomes void and of no effect after June 30.
- 6, Payment may only be made after the delivery and acceptance of goods or services.
- 7. Interest may be paid for late payment in accordance with the West Virginia Code.
- 8. Vendor preference will be granted upon written request in accordance with the West Virginia Gode.
- 9. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
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 1) Falls to implement its drug-free workplace policy;

 2) Fails to provide authority; or an authority faise information regarding implementation of the contractor's drug-free workplace policy."

INSTRUCTIONS TO BIDDERS

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FEB. 3. 2009 3:35PM WV DIV OF PURCH

NO. 5603 P. 1

03-02-2009



State of West Virginia
Department of Administration

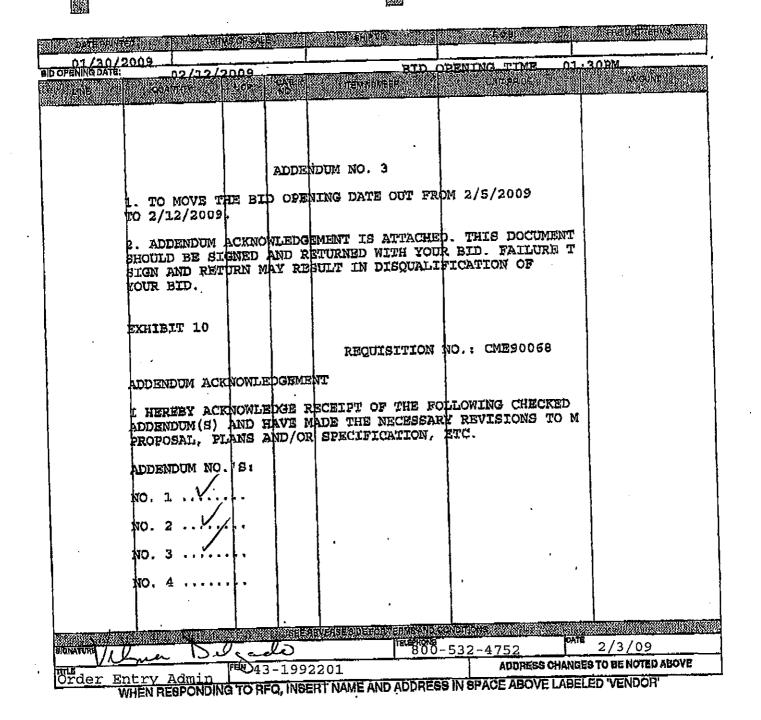
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2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

Request for seement to the seement t

ROBERTA WAGNER 304-358-0067

HEALTH AND HUMAN RESOURCES VARIOUS LOCALES AS INDICATED BY ORDER

TYPE NAME/ADDRESS HERE Thermo Electron North America LLC 1400 Northpoint Pkwy, Ste 50 West Palm Beach, FL 33407



FEB. 3. 2009 3:35PM WV DIV OF PURCH

NO. 5603 P. 2



5616888731

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

Request for

CME90068

NAMES AND DESCRIPTION OF THE PROPERTY OF THE P ROBERTA WAGNER 804-558-0067

HEALTH AND HUMAN RESOURCES VARIOUS LOCALES AS INDICATED BY ORDER

RFQ COPY TYPE NAME/ADDRESS HERE Thermo Electron North America LLC 1400 Northpoint Pkwy, Ste 50 West Palm Beach, FL 33407

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FEB. 3.2009 3:35PM WY DIV OF PURCH NO. 5603 P. 3

GENERAL TERMS & CONDITIONS REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)

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FEB. 3. 2009 3:37PM WV DIV OF PURCH

NO. 5603 P. 10

avas (Rev. 01.70 STATE C	F WES	r virginia	Files	Requi CMES Acct, No.:	lekion/P.O. No.: 10068
	HASE	CONTINUATION SHEET	RW22 Spending Units	0407-2008-293	7-045
Vendor:		P.O. Date:	DHHR/OCM	E	
Item No.	Quantity	Description		Unit Price	Amount
		VENDOR QUESTION #1:			
		in reviewing the solicitation, it indicates that the specific to 'establish the acceptable level of quality only and an intended to reflect a prefetence or favor any particular vendor,' but they do. The items listed in the RFQ ere poly one vendor — Waters Corporation. In addition, there is only one other vendo offer the 2 types of mass specimentars that are being requested. Many other vendors can offer high pressuringle quadrupole and time-of-flight mass specimentar other vendor can offer these proprietary software and hardware packages. These specifications are directly from Waters' literature.	e not brand or provided by or that can e HPLCs.		
		RESPONSE: The OCME Toxicology Lab stands by the specification have been submitted describing our requirements for MS/MS or LC "tandem MS" instrument and a (2) LC/T instrument. We have carefully prepared the specification factors that include, but are not limited to: Need to identify a wide range of drug/chemical entition be present at low concentrations. Once a drug has been identified, the need to accura measure its concentration. Very limited space available for these instruments in hence, the maximum footprint has been included in or specifications. Requirement that the LC pert of each instrument be or TOF component. Some vendors only manufacture or TOF component, but not the LC. Past experier proven that having two different companies responsitionals in the instrument causes unnecessary difficulty when needed. Preference to use a single vendor for both instrume eliminating the need for the analyst to master more that a system. VENDOR QUESTION #2: We believe it would be in the State's best interest to the solicitation the purpose and goals of the OCME is functional specifications and informing potential bidding technical requirements. To my knowledge, the OCME in the solicitation that requirements, nor have exampled the interest of the equipment, had representative samples analyzed by vendors, or performed site visits to the vendors to rule samples on their instruments. Best value is a ratio of the OCME.	a (1) LC/ OF CF lions based es that may tely the lab, ur andem MS the tandem tee has the for a repair is mis, thus han one include in by using ere of their E has not valuated potential n their f needs met		
		Continued on Re	xt page		

Line 1

* FEB. 3. 2009 3:38PM WV DIV OF PURCH

NO. 5603 P. 11

STATE OF WEST VIRGINIA
PURCHASE CONTINUATION SHEET

| Requisition / P.O. No.: | CME90068 | Pile: | Acct. No.: | | RW22 | 0407-2008-2937-045 | Spending Unit: | DHHR/QCME

PURCHAS	E CONTINUATION SHEET	RW22 0407-2008-2937-0 Spending Unit:)45
/andor:	P,O. Date:	DHHR/QCME	
tem No. Quantit	Description	Unit Price	Amount
	RESPONSE: The letter from Mr. Schwarz (Applied Biosystems) is crowr process in preparing bid specifications stating we have a least the process of preparing bid specifications stating we have potential vendors, or performed site visits to the vendoration samples on their instruments. We do not feel the should dictate the steps we take to determine our bid specifications. Our lab has purchased numerous analytications. Our lab has purchased numerous analytications in the past and never visited the vendors (worldwide), or provided the vendors samples to analyze the have taken the time to meet with representatives for several instrument manufacturers including Agilent, As Biosystems, and Waters. In point of fact, all four OCM lechnical staff members (Kristen Bailey, Myron Gebha Clay and Dr. Kraner) met with Mr. Schwarz and an LC specialist from Applied Biosystems for several hours of writing the specifications. We have also spoken to nut scientists including those at AIT and the National Institute Drug Abuse, it was actually someone that the Applied Biosystems representatives recommended we talk to most definite that the combination of LC/TOF and LC MS, as described in our bid specifications was most advantageous in meeting our needs.	nave not siyzed by re to run at vendors scattered se, rom oplied lie leb rdi, Dave //MS of or to mercus tute of who felt	
	VENDOR QUESTION #3: Applied Biosystems are a world leader in the application. We have instrumentation is the most reputable toxicology labs in the country like the FBI, the National on Drug Abuse, the Georgia Bureau of Investigation, Forces Institute of Pathology, the Department of Defe Testing Lab, and in private labs like National Madical and AIT Labs. We have many types of analytical equipment their needs once they are defined. For example triple quadrupole mass spectrometer listed, we have products that could meet the State's needs. To achieve fair and open competition, we believe that solicitation at least be broken into 2 solicitation - one system. The State will receive more responses and survey of what is available on the market. If splitting solicitation is not an option, then based on the Inform notice, I would like to formally request that this RFQ is or cancelled.	le a) Institute Armed anse Drug Services alloment to be, for the 4 different at this for each better the ation in the	
	Continued on next pag	в	

FEB. 3. 2009 3:38PM WV DIV OF PURCH

NO. 5603 P. 12

Requisition / P.O. No.: WYSE (RAV, OSOLIOT) STATE OF WEST VIRGINIA Acct. No.: 0407-2008-2937-045 File: PURCHASE CONTINUATION SHEET RW22 Spending Unit: DHHRIOCME P,O. Date: Amount Unit Price Description Quantity item No. RESPONSE: The OCME lab staff includes three American Board of Forensio Toxicology-certified scientists who are fully qualified to evaluate the instrumentation under consideration and select the systems that are best suited to our needs. None of the lab staff have any financial interest in any of the companies that manufacturer these instruments. We feel that the bid specifications contained in RFQ CME90068 are appropriate in describing our apacifications for these instruments. VENDOR QUESTION #4: The bld states that the model / brand / specifications listed in the bid are for quality levels only, and that alternate or equivalent proposals will be accepted. However, the requirements listed are Waters system specifications, all the way down to the software and informatics. What requirements will the State use to fairly avaluate the proposal of an alternate brand? RESPONSE: Vendor must submit pertinent literature on alternate equipment bid which proves that the alternate equipment is comparable to the requested specifications. VENDOR QUESTION #5: Could those non brand specific requirements be added to the RFQ? RESPONSE: No, non brand specific requirements can not be added because it is up to the the vendor that is bidding alternate equipment to prove that the equipment is equivalent and will meet the specifications listed. VENDOR QUESTION #8: In paragraph 2 of the "General T's &C's", it states that the State may accept in part or in whole any bid, though in "Additional Requirements", page 22, paragraph 3 the bid states that the vendor must manufacture both systems. Are partial awards possible and if not, why must the vendor manufacture both systems?" RESPONSE

in regard to "partial awards and why the vendor must

response to question #1.

manufacture both systems", this was previously answered in the

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9 10:47AM WV DIV OF PURCH uest for State of West Virginia Quotation CME90068

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

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RFQ COPY TYPE NAME/ADDRESS HERE

Thermo Electron North America LLC 1400 Worthpoint PKWay Juite 60 West Palm Bach, FL 33407

HEALTH AND HUMAN RESOURCES VARIOUS LOCALES AS INDICATED BY ORDER

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10:47AM WY DIV OF PURCH STATE OF West Virginia request for Department of Administration Quotation Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

NO. 5622 CME90068

04:45:56 p.m.

ROBERTA WAGNER

AN ANADOLESA CORRESPONDENCE LO ENTROLOPINA ENTRO B04-558-0067

RFQ COPY

Thermo Electron North America LLC 1400 Northpoint Pkwy, Ste 50 West Palm Beach, FL 33407

HEALTH AND HUMAN RESOURCES VARIOUS LOCALES AS INDICATED BY ORDER

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