



RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
**Bid Receiving Public Works and Government
Services Canada/Réception des soumissions
Travaux publics et Services gouvernementaux
Canada**
Room 100,
167 Lombard Ave.
Winnipeg
Manitoba
R3B 0T6
Bid Fax: (204) 983-0338

**REQUEST FOR PROPOSAL
DEMANDE DE PROPOSITION**

**Proposal To: Public Works and Government
Services Canada**

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

**Proposition aux: Travaux Publics et Services
Gouvernementaux Canada**

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexée, au(x) prix indiqué(s).

Comments - Commentaires

Title - Sujet Laboratory Equipment, Various	
Solicitation No. - N° de l'invitation A7100-163583/A	Date 2017-01-12
Client Reference No. - N° de référence du client A7100-163583	
GETS Reference No. - N° de référence de SEAG PW-\$WPG-016-10117	
File No. - N° de dossier WPG-6-39202 (016)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2017-02-22	Time Zone Fuseau horaire Central Standard Time CST
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Hall, Marlene	Buyer Id - Id de l'acheteur wpg016
Telephone No. - N° de téléphone (204) 230-0147 ()	FAX No. - N° de FAX (204) 983-7796
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: Wills Transfer Ltd. 3100 Swansea Crescent Ottawa, ON. K1G 3W4 c/o Claudette Weedmark	

Instructions: See Herein

Instructions: Voir aux présentes

Vendor/Firm Name and Address

**Raison sociale et adresse du
fournisseur/de l'entrepreneur**

Issuing Office - Bureau de distribution

Public Works and Government Services Canada - Western
Region
Room 100
167 Lombard Ave.
Winnipeg
Manitoba
R3B 0T6

Delivery Required - Livraison exigée See Herein	Delivery Offered - Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur	
Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)	
Signature	Date

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PART 1 - GENERAL INFORMATION

1.1 Requirement

The requirement is detailed under Article 6.2 of the resulting contract clauses.

1.2 Comprehensive Land Claims Agreement(s)

This procurement is subject to the following Comprehensive Land Claims Agreement(s):

- Agreement Between The Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada

1.3 Debriefings

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days from receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

1.4 Trade Agreements

The requirement is subject to the provisions of the World Trade Organization Agreement on Government Procurement (WTO-AGP), the North American Free Trade Agreement (NAFTA), and the Agreement on Internal Trade (AIT).

PART 2 - BIDDER INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the *Standard Acquisition Clauses and Conditions Manual* (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The 2003 (2016-04-04) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

Subsection 5.4 of 2003, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 days

Insert: 120 days

2.1.1 SACC Manual Clauses

B1000T (2014-06-26) Condition of Material – Bid

2.2 Submission of Bids

Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation.

2.2.1 Improvement of Requirement During Solicitation Period

Should bidders consider that the specifications or Statement of Work contained in the bid solicitation could be improved technically or technologically, bidders are invited to make suggestions, in writing, to the Contracting Authority named in the bid solicitation. Bidders must clearly outline the suggested improvement as well as the reason for the suggestion. Suggestions that do not restrict the level of competition nor favour a particular bidder will be given consideration provided they are submitted to the Contracting Authority at least 15 days before the bid closing date. Canada will have the right to accept or reject any or all suggestions.

2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than 10 calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by Bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated, and the enquiry can be answered to all Bidders. Enquiries not submitted in a form that can be distributed to all Bidders may not be answered by Canada.

2.4 Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Manitoba.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the Bidders.

2.5 Bidders' Conference

A bidders' conference will be held on January 25, 2017 to provide information and opportunities for bidders to ask questions about the solicitation and the procurement process. Supplier's attendance is optional. The bidders' conference will be held at Public Works and Government Services Canada (PWGSC), 167 Lombard Avenue, Winnipeg, Manitoba via web-ex and teleconference. The bidders' conference will begin at 1:00 pm Central Standard Time.

Bidders are requested to communicate with the Contracting Authority before the conference to confirm attendance and receive teleconference and web-ex instructions. Bidders should provide, in writing, to the Contracting Authority, the name(s) of the person(s) who will be attending and a list of issues they wish to table no later than January 23, 2017, 2:00 pm CST.

Any clarifications or changes to the bid solicitation resulting from the bidders' conference will be included as an amendment to the bid solicitation. Bidders who do not attend will not be precluded from submitting a bid.

Contracting Authority: Marlene Hall
Telephone: 204-230-0147
Email: marlene.hall@pwgsc-tpsgc.gc.ca

PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

Canada requests that Bidders provide their bid in separately bound sections as follows:

Section I: Technical Bid (1 hard copy)

Section II: Financial Bid (1 hard copy)

Section III: Certifications (1 hard copy)

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

Canada requests that Bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation.

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process [Policy on Green Procurement](http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, Bidders should:

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

Section I: Technical Bid

In their technical bid, Bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

Section II: Financial Bid

Bidders must submit their financial bid in accordance with the Basis of Payment. The total amount of Applicable Taxes must be shown separately.

3.1.1 Electronic Payment of Invoices – Bid

If you are willing to accept payment of invoices by Electronic Payment Instruments, complete Annex “C” Electronic Payment Instruments, to identify which ones are accepted.

If Annex “C” Electronic Payment Instruments is not completed, it will be considered as if Electronic Payment Instruments are not being accepted for payment of invoices.

Acceptance of Electronic Payment Instruments will not be considered as an evaluation criterion.

3.1.2 Exchange Rate Fluctuation

[C3011T](#) (2013-11-06), Exchange Rate Fluctuation

Section III: Certifications

Bidders must submit the certifications and additional information required under Part 5.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1 Evaluation Procedures

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

4.1.1 Technical Evaluation

4.1.1.1 Mandatory Technical Criteria

- (a) Bidder must be able to perform the scope of the work described in the Annex A, Requirement and meet the Minimum Mandatory Performance Specifications detailed in Annex A.
- (b) Bidder must complete the Compliance Matrix detailed in Annex A, Requirement. Completion is defined as indication of compliance to the mandatory criterion as outlined in Annex A, Requirement

4.1.2 Financial Evaluation

SACC Manual Clause [A0220T](#) (2014-06-26), Evaluation of Price

4.2 Basis of Selection

4.2.1 Basis of Selection – Multiple Items

A bid must comply with the requirements of the bid solicitation and meet all mandatory technical evaluation criteria to be declared responsive. The responsive bid with the lowest evaluated price on an item by item basis will be recommended for award of a contract.

[*SACC Manual* Clause [A0272T](#) (2010-08-16)]

PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

Bidders must provide the required certifications and additional information to be awarded a contract.

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Unless specified otherwise, Canada will declare a bid non-responsive, or will declare a contractor in default if any certification made by the Bidder is found to be untrue whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority will render the bid non-responsive or constitute a default under the Contract.

5.1 Certifications Required with the Bid

Bidders must submit the following duly completed certifications as part of their bid.

5.1.1 Integrity Provisions - Declaration of Convicted Offences

In accordance with the [Ineligibility and Suspension Policy](http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide with its bid the required documentation, as applicable, to be given further consideration in the procurement process.

5.2 Certifications Precedent to Contract Award and Additional Information

The certifications and additional information listed below should be submitted with the bid, but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame provided will render the bid non-responsive.

5.2.1 Integrity Provisions – Required Documentation

In accordance with the [Ineligibility and Suspension Policy](http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

5.2.2 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list available at the bottom of the page of the [Employment and Social Development Canada \(ESDC\) - Labour's](http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_program.page?&_ga=1.229006812.1158694905.1413548969) website ([http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_p](http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_program.page?&_ga=1.229006812.1158694905.1413548969)rogram.page?&_ga=1.229006812.1158694905.1413548969).

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list at the time of contract award.

Canada will also have the right to terminate the Contract for default if a Contractor, or any member of the Contractor if the Contractor is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](#)" list during the period of the Contract.

The Bidder must provide the Contracting Authority with a completed annex [Federal Contractors Program for Employment Equity - Certification](#), before contract award. If the Bidder is a Joint Venture, the Bidder must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification, for each member of the Joint Venture.

PART 6 - RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

6.1 Security Requirements

6.1.1 There is no security requirement applicable to the Contract.

6.2 Requirement

The Contractor must provide the items detailed under the "Requirement" at Annex "A".

6.3 Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) issued by Public Works and Government Services Canada.

6.3.1 General Conditions

[2010A](#) (2016-04-04), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

6.4 Term of Contract

6.4.1 Delivery Date

All the deliverables must be received on or before March 31, 2017.

6.4.2 Comprehensive Land Claims Agreement(s)

This procurement is subject to the following Comprehensive Land Claims Agreement(s):

- Nunavut Land Claims Agreement

6.4.3 Delivery Points

Delivery of the requirement will be made to delivery point(s) specified at Annex "A" of the Contract.

6.5 Authorities

6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Marlene Hall
Procurement Specialist
Public Works and Government Services Canada
Acquisitions and Compensation Branch
100 - 167 Lombard Avenue
Winnipeg, MB. R3B 0T6

Telephone: 204 230-0147
Fax: 204 983-7796
Email: marlene.hall@pwgsc-tpsgc.gc.ca

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

6.5.2 Project Authority

The Project Authority for the Contract is: *A contact to be named at date of contract issuance*

The Project Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Project Authority, however the Project Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

6.5.3 Contractor's Representative

Name: _____
Title: _____
Organization: _____
Address: _____
Telephone: _____
Facsimile: _____
Email: _____

6.6 Payment

6.6.1 Basis of Payment

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price(s), as specified in Annex B of \$_____. Customs duties are included and Applicable Taxes are extra.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

6.6.2 Single Payment

SACC Manual clause [H1000C](#) (2008-05-12) Single Payment

6.6.3 Inspection and Acceptance

The Technical Authority is the Inspection Authority. All reports, deliverable items, documents, goods and all services rendered under the Contract are subject to inspection by the Inspection Authority or representative. Should any report, document, good or service not be in accordance with the requirements of the Statement of Work and to the satisfaction of the Inspection Authority, as submitted, the Inspection Authority will have the right to reject it or require its correction at the sole expense of the Contractor before recommending payment.

6.6.4 Electronic Payment of Invoices – Contract

The Contractor accepts to be paid using any of the following Electronic Payment Instrument(s):

- a. Direct Deposit (Domestic and International)

6.7 Invoicing Instructions

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.
2. Invoices must be distributed as follows:
 - a. The original and one (1) copy must be forwarded to the address shown on page 1 of the Contract for certification and payment.

6.8 Certifications and Additional Information

6.8.1 Compliance

Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the Contract.

6.8.2 Federal Contractors Program for Employment Equity - Default by the Contractor

The Contractor understands and agrees that, when an Agreement to Implement Employment Equity (AIEE) exists between the Contractor and Employment and Social Development Canada (ESDC)-Labour, the AIEE must remain valid during the entire period of the Contract. If the AIEE becomes invalid, the name of the Contractor will be added to the "[FCP Limited Eligibility to Bid](#)" list. The imposition of such a sanction by ESDC will constitute the Contractor in default as per the terms of the Contract.

6.9 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Manitoba.

6.10 Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- (a) the Articles of Agreement;
- (b) the general conditions [2010A](#) (2016-04-04), General Conditions - Goods (Medium Complexity);
- (c) Annex A, Requirement;
- (d) Annex B, Basis of Payment;
- (e) the Contractor's bid dated _____.

6.11 SACC Manual Clauses

B1501C	(2006-06-16)	Electrical Equipment
B7500C	(2006-06-16)	Excess Goods
C2000C	(2007-11-30)	Taxes – Foreign-based Contractor
C5201C	(2008-05-12)	Prepaid Transportation Costs
D4002C	(2013-04-25)	Shipping Instructions-Free on Board Destination and delivered Duty Paid
G1005C	(2016-01-28)	Insurance – No Specific Requirement

ANNEX "A" - REQUIREMENT

The Canadian High Arctic Research Station (CHARS) has a requirement for the supply and delivery of various Laboratory Equipment.

A complete list of the mandatory technical specifications is detailed in the Compliance Matrix.

Delivery, FOB Destination: Wills Transfer Ltd.
3100 Swansea Crescent
Ottawa, ON. K1G 3W4
(613) 744-0970 ext. 201
c/o Claudette Weedmark

Delivery to be coordinated with the Project Authority and must be delivered to Wills Transfer Ltd on or before March 31, 2017. (Project Authority contact information to be provided at time of contract award)

Installation, if required, will be negotiated with the Contactor under a separate contract.

Bidders can bid on one item or more than one item. The responsive bids with the lowest evaluated price on an item by item basis will be recommended for award of a contract. It is anticipated multiple contracts will be awarded.

Instructions:

A complete list of the minimum mandatory technical specifications are detailed in the Compliance Matrix.

1. Bidders are to provide supporting technical documentation for the specifications detailed in the Compliance Matrix, and cross-reference where the supporting documentation is found within the proposal to demonstrate compliance. Bidders are to clearly demonstrate compliance with the specifications.
2. Supporting technical documentation, such as specification sheets, technical brochures, and photographs or illustrations should provide adequate detail to substantiate that the goods offered meet the technical requirements. It is the Bidders responsibility to ensure that the submitted technical documentation provides adequate detail to prove that the proposed product(s) meet the requirements of the technical specification. If specific published technical documentation is not available, the Bidder should prepare a written narrative complete with a detailed explanation of how its bid demonstrates technical compliance.
3. If the complete specification and/or literature is not submitted as requested, the Contracting Authority will so inform the Bidder and provide the Bidder with a time frame within which to meet the requirement. Failure to comply with the request of the Contracting Authority and meet the requirement within that time period will render the bid non-responsive.
4. Canada will not evaluate information such as references to Web site addresses where additional information can be found.
5. Bidders must address any concerns with the Specifications in written detail to the Contracting Authority before bid closing as outlined in the Request for Proposal (RFP) document.
6. Failure to meet the minimum mandatory specifications will result in your proposal being deemed non-responsive, and be given no further consideration in the evaluation process.

Compliance Matrix – MINIMUM MANDATORY PERFORMANCE SPECIFICATIONS:

STREAM 1 - CENTRIFUGES

	<p><u>Completion and submission of Mandatory Performance Specification is required to be considered responsive and for your offer to be given further consideration.</u></p> <p>a. Bidder must cross reference where in their technical offer, the performance specification is located.</p> <p>b. Provide the specification being offered which meets or exceeds <u>and cross-reference as to where the supporting documentation is found within your proposal</u>. If there is insufficient space in the table, assign SIR # (Supplementary Information Reference) and provide the appropriate details on a separate page in your offer. Where published supporting documentation is not available in the form of brochures, technical data sheets etc., prepare a written narrative complete with a detailed explanation of how its offer demonstrates compliance.</p>	
	<p><u>All work and materials herein specified must meet and maintain minimum Canadian and Provincial certification(s) and approval(s) as applicable by Industry Standards.</u></p>	
Item	Specifications	Bidder Response: indicate how they meet the specifications addressed below/ cross-reference where this technical specification is indicated in their bid documentation
1	Centrifuge, micro, refrigerated, with rotors	
1.1	Dimensions: <ul style="list-style-type: none"> Width: 300mm ±25mm Depth: 450mm ±50mm Height: 350mm ±25mm (w/ lid closed) 	
1.2	Lid: <ul style="list-style-type: none"> Hinged w/ safety interlock 	
1.3	Maximum RCF: 21,000g ±750g w/ typical 1.5ml / 2.0ml rotor	
1.4	Maximum speed: 14,500rpm ±500rpm w/ typical 1.5ml / 2.0ml rotor	
1.5	Typical rotor w/ biocontainment lid	

1.6	Digital operating system: <ul style="list-style-type: none"> • Programmable time range : 1min to 99min by 1min increment & "hold" mode • Temperature range: -10°C to 40°C ±3°C 	
1.7	LED display: <ul style="list-style-type: none"> • Speed • Time • Temperature 	
1.8	Direct Drive brushless motor	
1.9	Electrical requirement: <ul style="list-style-type: none"> • 120V/60Hz • CSA approved or equivalent (i.e. cUL compliant) 	
1.10	Mandatory accessories: (PER instrument) <ul style="list-style-type: none"> • One (1) rotor for 1.5 / 2.0ml microtubes rotor w/ lid • One (1) dual row rotor for 2.0ml microtubes and 0.5ml PCR microtubes rotor w/ lid 	
1.11	Manual (English language): <ul style="list-style-type: none"> • Installation, Operation/User Manual • Service Manual 	
2	Centrifuge, table-top, non-refrigerated, with rotors and adaptors	
2.1	Dimensions: <ul style="list-style-type: none"> • Width: 475mm ±50mm • Depth: 625mm ±50mm • Height: 350mm ±50mm (w/ lid closed) 	
2.2	Lid: <ul style="list-style-type: none"> • Hinged • w/ safety interlock 	
2.3	Digital operating system: <ul style="list-style-type: none"> • Programmable time range : 1min to 9 hours, 99min by 1min increment & "continuous" mode; • Minimum five (5) acceleration and deceleration rates; • Minimum five (5) program instant selection keys; • Program library holding a minimum of twenty (20) programs. 	
2.4	LED display: <ul style="list-style-type: none"> • Speed • Time • Acceleration rate • Deceleration rate 	
2.5	Direct Drive brushless motor	

2.6	<p>Electrical requirement:</p> <ul style="list-style-type: none"> • 120V/60Hz • CSA approved or equivalent (i.e. cUL compliant) 	
2.7	<p>Rotor and adaptor sets for each instrument:</p> <p>One (1) swinging buckets rotor</p> <ul style="list-style-type: none"> • Four (4) 400ml buckets w/ biocontainment lid; • Four (4) adaptor for 5/7ml blood collection tubes; • Four (4) adaptor for 15ml glass culture tubes; • Four (4) adaptor for 15ml conical tubes; • Four (4) adaptor for 15ml round bottom tubes; • Four (4) adaptor for 50ml conical bottom tubes. 	
2.8	<p>Manual (English language):</p> <ul style="list-style-type: none"> • Installation, Operation/User Manual • Service Manual 	
3	Fixed angled rotor sets (must be compatible with line item 2 - Centrifuge, table-top, non-refrigerated, w/rotors and adaptors)	
3.1	<p>Two (2) 34° fixed angle rotor for pelleting prokaryotic and eukaryotic cells in 50ml tubes at 12,500 ±750g w/ lid</p> <ul style="list-style-type: none"> • adaptors for 15ml conical tubes to fit available positions <p>Two (2) 25° fixed angle rotor for pelleting cells, bacteria, subcellular fraction and nucleic acids at 24,000g or more ±750g w/ lid</p> <ul style="list-style-type: none"> • adaptors for 15ml conical tubes to fit available positions • adaptors for 50ml conical tubes to fit available positions • adaptors for 6.5ml round bottom tubes to fit available positions • adaptors for 16ml round bottom tubes to fit available positions • adaptors for 50ml round bottom tubes to fit available positions • adaptors for 100ml round bottom tubes to fit available positions <p>Two (2) 1.5 / 2.0ml microtubes rotor w/ lid</p>	
3.2	<p>Manual (English language):</p> <ul style="list-style-type: none"> • Installation, Operation/User Manual • Service Manual 	
4	Centrifuge, table-top, refrigerated, with rotors and adaptors	
4.1	<p>Dimensions:</p> <ul style="list-style-type: none"> • Width: 475mm ±50mm • Depth: 625mm ±50mm • Height: 350mm ±50mm (w/ lid closed) 	

4.2	<p>Lid:</p> <ul style="list-style-type: none"> • Hinged • w/ safety interlock 	
4.3	<p>Digital operating system:</p> <ul style="list-style-type: none"> • Programmable time range : 1min to 9hours 99min by 1min increment & "continuous" mode; • Temperature range: -10°C to 40°C ±3°C; • Minimum five (5) acceleration and deceleration rates; • Minimum five (5) program instant selection keys; • Program library holding a minimum of twenty (20) programs. 	
4.4	<p>LED display:</p> <ul style="list-style-type: none"> • Speed • Time • Temperature • Acceleration rate • Deceleration rate 	
4.5	Direct Drive brushless motor	
4.6	<p>Electrical requirement:</p> <ul style="list-style-type: none"> • 120V/60Hz • CSA approved or equivalent (i.e. cUL compliant) 	
4.7	<p>Rotor and adaptor sets (for each instrument):</p> <p>One (1) swinging buckets rotor</p> <ul style="list-style-type: none"> • Four (4) 400ml buckets w/ biocontainment lid; • Four (4) adaptor for 5/7ml blood collection tubes; • Four (4) adaptor for 15ml glass culture tubes; • Four (4) adaptor for 15ml conical tubes; • Four (4) adaptor for 15ml round bottom tubes; • Four (4) adaptor for 50ml conical bottom tubes; 	
5	<p>Fixed angled rotor sets (<u>must be compatible with line item 4 - Centrifuge, table-top, refrigerated, w/rotors and adaptors</u>)</p>	

5.1	<p>Three (3) 34° fixed angle rotor for pelleting prokaryotic and eukaryotic cells in 50ml tubes at 12,500 ±750g w/ lid</p> <ul style="list-style-type: none"> • adaptors for 15ml conical tubes to fit available positions <p>Three (3) 25° fixed angle rotor for pelleting cells, bacteria, subcellular fraction and nucleic acids at >24,000g ±750g w/ lid</p> <ul style="list-style-type: none"> • adaptors for 15ml conical tubes to fit available positions • adaptors for 50ml conical tubes to fit available positions • adaptors for 6.5ml round bottom tubes to fit available positions • adaptors for 16ml round bottom tubes to fit available positions • adaptors for 50ml round bottom tubes to fit available positions • adaptors for 100ml round bottom tubes to fit available positions <p>Three (3) 1.5/2,0ml microtubes rotor w/ lid</p>	
6	Centrifuge Evaporator	
6.1	<p>Dimensions:</p> <ul style="list-style-type: none"> • Width: 350mm ±50mm • Depth: 450mm ±50mm • Height: 350mm ±25mm (w/ lid closed) 	
6.2	<p>Lid:</p> <ul style="list-style-type: none"> • Hinged • w/ safety interlock • Made of safety glass 	
6.3	<p>Chamber:</p> <ul style="list-style-type: none"> • with radiant lamp within the chamber • PolyTetraFluoroEthylene (PTFE) coated • PTFE coated plumbing and tubing • Resistant to TFA, DMSO and other organic solvents • w/ bleeder valve 	
6.4	<p>Digital operating system:</p> <ul style="list-style-type: none"> • Programmable time range : 1min to 10hours by 1min increment • Temperature range: 35°C to 80°C ±5°C in 5°C increment • Minimum three (3) vacuum ramp rates • Programmable vacuum control settings from 25 to 0.1mBar 	
6.5	<p>Digital display:</p> <ul style="list-style-type: none"> • Speed • Time • Temperature 	

6.6	Direct Drive brushless motor	
6.7	Electrical requirement: <ul style="list-style-type: none"> • 120V/60Hz • CSA approved or equivalent (i.e. cUL compliant) 	
6.8	Mandatory accessories (PER instrument): <ul style="list-style-type: none"> • One(1) fixed angle rotor for 35 to 45 1,5ml microtubes • One(1) fixed angle rotor for 55 to 65 1,5ml microtubes 	
6.9	Manual (English language): <ul style="list-style-type: none"> • Installation, Operation/User Manual • Service Manual 	
7	Centrifuge, micro, non refrigerated, w/ rotors	
7.1	Dimensions: <ul style="list-style-type: none"> • Width: 250mm ±25mm • Depth: 350mm ±50mm • Height: 250mm ±25mm (w/ lid closed) 	
7.2	Lid: <ul style="list-style-type: none"> • Hinged • w/ safety interlock 	
7.3	Maximum RCF: 21,000g ±750g w/ typical 1.5ml/2.0ml rotor	
7.4	Maximum speed: 14,500rpm ±500rpm w/ typical 1.5ml/2.0ml rotor	
7.5	Typical rotor w/ biocontainment lid	
7.6	Digital operating system: <ul style="list-style-type: none"> • Programmable time range : 1min to 99min by 1 min increment & "hold" mode 	
7.7	LED display: <ul style="list-style-type: none"> • Speed • Time 	
7.8	Direct Drive brushless motor	
7.9	Electrical requirement: <ul style="list-style-type: none"> • 120V/60Hz • CSA approved or equivalent (i.e. cUL compliant) 	

7.10	Mandatory accessories: PER instrument <ul style="list-style-type: none"> One (1) rotor for 1,5/2,0ml microtubes rotor w/ lid One (1) dual row rotor for 2,0ml microtubes and 0,5ml PCR microtubes rotor w/ lid 	
7.11	Manual (English language): <ul style="list-style-type: none"> Installation, Operation/User Manual Service Manual 	
8	Centrifuge, mini-micro, non-refrigerated	
8.1	Dimensions: <ul style="list-style-type: none"> Width: 250mm ±50mm Depth: 250mm ±50mm Height: 150mm ±50mm (w/ lid closed) 	
8.2	Lid: <ul style="list-style-type: none"> Hinged w/ safety interlock 	
8.3	Maximum RCF: 13,000g ±1000g w/ typical 1.5ml/2.0ml rotor	
8.4	Maximum speed: 14,000rpm ±1000rpm w/ typical 1.5ml/2.0ml rotor	
8.5	Minimum rotor capacity: 10 x 1.5ml/2.0ml tubes	
8.6	Digital operating system: <ul style="list-style-type: none"> Programmable speed Programmable time range : 15sec to 30min & "hold" mode 	
8.7	LED display: <ul style="list-style-type: none"> Speed (g or rcf) Time 	
8.8	Direct Drive brushless motor	
8.9	Electrical requirement: <ul style="list-style-type: none"> 120V/60Hz CSA approved or equivalent (i.e. cUL compliant) 	
8.10	Mandatory accessories: <ul style="list-style-type: none"> One (1) 45° fixed angle rotor for 1.5/2.0ml tubes w/lid adaptors for 0,5ml tube to fit available positions adaptors for 0,2ml tube to fit available positions 	
8.11	Manual (English language): <ul style="list-style-type: none"> Installation, Operation/User Manual Service Manual 	

STREAM 2 – BALANCES

<p><u>Completion and submission of Mandatory Performance Specification is required to be considered responsive and for your offer to be given further consideration.</u></p> <p>c. Bidder must cross reference where in their technical offer, the performance specification is located.</p> <p>d. Provide the specification being offered which meets or exceeds <u>and cross-reference as to where the supporting documentation is found within your proposal.</u> If there is insufficient space in the table, assign SIR # (Supplementary Information Reference) and provide the appropriate details on a separate page in your offer. Where published supporting documentation is not available in the form of brochures, technical data sheets etc., prepare a written narrative complete with a detailed explanation of how its offer demonstrates compliance.</p>		
<p><u>All work and materials herein specified must meet and maintain minimum Canadian and Provincial certification(s) and approval(s) as applicable by Industry Standards.</u></p>		
Item	Specifications	Bidder Response: indicate how they meet the specifications addressed below/ cross-reference where this technical specification is indicated in their bid documentation
9	Balance, analytical, dual range, semi-micro, very high precision, capacity 81g/220g, readability 0.01mg/0.1mg	
9.1	Dual capacity: 81g/220g ±5/10g	
9.2	Readability: 0.01mg/0.1mg	
9.3	Nominal repeatability: 0,03mg	
9.4	5% load repeatability: 0,015mg	
9.5	Linear deviation: 0,15mg	
9.6	Fastening point for anti-theft device	
9.7	Stabilization time: 2 seconds or less	
9.8	Weighing platform dimensions: <ul style="list-style-type: none"> • Width : 75mm ±10mm • Depth : 75mm ±10mm 	

9.9	<p>Features:</p> <ul style="list-style-type: none"> Automated adjustment w/ internal weight Level sensor/detector Internal temperature control Electronic overload protection Static detector Built-in RS232 interface and port 	
9.10	<p>Terminal w/ display:</p> <ul style="list-style-type: none"> Touch screen Status and application indicators User profil ID Date and time Weight unit, net, tare and gross weight display 	
9.11	<p>Applications:</p> <ul style="list-style-type: none"> Static Weighing Percent weighing Differential weighing Statistics Density determination Pipette test Titration 	
9.12	Minimum two (2) leveling feet	
9.13	Built-in RS232 interface and port	
9.14	<p>Electrical requirement:</p> <ul style="list-style-type: none"> 120V/60Hz CSA approved or equivalent (i.e. cUL compliant) 	
9.15	Dust cover	
9.16	Glass draft shield	
9.17	<p>Manual (English language):</p> <ul style="list-style-type: none"> Installation, Operation/User Manual Service Manual 	
10	Balance, high precision, capacity 510g, readability 1mg	
10.1	Capacity: 510g ±25g	
10.2	Readability: 1.0mg	

10.3	Nominal repeatability: 0.9mg	
10.4	Linear deviation: maximum 2mg	
10.5	Fastening point for anti-theft device	
10.6	Stabilization time: 2 seconds or less	
10.7	Weighing platform dimensions: <ul style="list-style-type: none"> Width: 125mm ±10mm Depth: 125mm ±10mm 	
10.8	Features: <ul style="list-style-type: none"> Automated adjustment w/ internal weight Built-in weight overload protection Built-in RS232 interface and port 	
10.9	Terminal w/ display: <ul style="list-style-type: none"> Touch screen Status and application indicators User profil ID Date and time Weight unit, net, tare and gross weight display 	
10.10	Applications: <ul style="list-style-type: none"> Static Weighing Percent weighing Statistics 	
10.11	Minimum two (2) leveling feet	
10.12	Built-in RS232 interface and port	
10.13	Electrical requirement: <ul style="list-style-type: none"> 208V/60Hz CSA approved or equivalent (i.e. cUL compliant) 	
10.14	Dust cover	
10.15	Manual (English language): <ul style="list-style-type: none"> Installation, Operation/User Manual Service Manual 	
11	Balance, laboratory grade, capacity 2100g, readability 10mg	
11.1	Capacity: 2100g ±100g	

11.2	Readability: 10.0mg	
11.3	Nominal repeatability: 8mg	
11.4	Linear deviation: maximum 20mg	
11.5	Fastening point for anti-theft device	
11.6	Stabilization time: 2 seconds or less	
11.7	Weighing platform: <ul style="list-style-type: none"> • Width: 200mm ±25mm • Depth: 200mm ±25mm • Made of stainless steel and resistant to corrosive chemicals 	
11.8	Features: <ul style="list-style-type: none"> • Automated adjustment w/ internal weight • Built-in weight overload protection • Built-in RS232 interface and port • Resistant to liquid and dust according to IP54 	
11.9	Terminal w/ display: <ul style="list-style-type: none"> • Touch screen • Status and application indicators • User profil ID • Date and time • Weight unit, net, tare and gross weight display 	
11.10	Applications: <ul style="list-style-type: none"> • Static Weighing • Percent weighing • Statistics 	
11.11	Minimum two (2) leveling feet	
11.12	Dust cover	
11.13	Electrical requirement: <ul style="list-style-type: none"> • 208V/60Hz • CSA approved or equivalent (i.e. cUL compliant) 	
11.14	Manual (English language): <ul style="list-style-type: none"> • Installation, Operation/User Manual • Service Manual 	
12	Balance, educational grade, capacity 2200g, readability 0.1g	
12.1	Capacity: 2200g ±100g	

12.2	Readability: 1.0g	
12.3	Nominal repeatability: 0.1g	
12.4	Linear deviation: maximum 0.2g	
12.5	Fastening point for anti-theft device	
12.6	Stabilization time: 2 seconds or less	
12.7	Weighing platform: <ul style="list-style-type: none"> • Width: 200mm ±25mm • Depth: 200mm ±25mm • Made of stainless steel 	
12.8	Features: <ul style="list-style-type: none"> • Automated adjustment w/ internal weight • Built-in weight overload protection • Built-in RS232 interface and port • Field operation capable (w/ batteries) 	
12.9	Terminal w/ display: <ul style="list-style-type: none"> • Touch screen • Status and application indicators • Weight unit, net, tare and gross weight display 	
12.10	Applications: <ul style="list-style-type: none"> • Static Weighing • Percent weighing • Statistics 	
12.11	Minimum two (2) leveling feet	
12.12	Dust cover	
12.13	Electrical requirement: <ul style="list-style-type: none"> • 208V/60Hz • CSA approved or equivalent (i.e. cUL compliant) 	
12.14	Manual (English language): <ul style="list-style-type: none"> • Installation, Operation/User Manual • Service Manual 	
13	Balance, industrial grade, capacity 30kg, w/ washable weighing platform	
13.1	Floor and bench application	
13.2	Water resistant and washable	

13.3	Capacity: 35kg ±5kg: <ul style="list-style-type: none"> • Overload capacity: minimum 125% 	
13.4	Certified resolution: minimum 1:3000	
13.5	Displayed resolution: minimum 1:6000	
13.6	Certified readability: 0,01kg	
13.7	Default readability: 0,005kg	
13.8	Stabilization time: 2 seconds or less	
13.9	Weighing platform dimensions: <ul style="list-style-type: none"> • Width : 300mm ±25mm • Depth : 350mm ±50mm 	
13.10	External dimensions: <ul style="list-style-type: none"> • Width : 300mm ±25mm • Depth : 475mm ±25mm • Height, floor to weighing platform : 100mm ±25mm 	
13.11	Construction: <ul style="list-style-type: none"> • Weighing platform: stainless steel • Column, frame and base: Painted or stainless steel • Sealed load cell <ul style="list-style-type: none"> ○ Load cell minimal level of protection: IP67 • ABS swivel indicator made or better 	
13.12	Display: <ul style="list-style-type: none"> • LCD display w/ white LED backlight • Minimum 5-digit • Weighing unit: lb, oz, lb:oz, kg, g, custom unit • Primary digit: minimum 25mm high • Alpha-numeric keypad • Column and wall mountable 	

13.13	<p>Features and applications:</p> <ul style="list-style-type: none"> • Static weighing • Counting • Check weighing • Percent weighing • Display hold • Accumulation • Gravity acceleration correction enabled • Auto-zero tracking: Off, 0,5, 1 or 3d (default readability) 	
13.14	Four (4) leveling feet	
13.15	Built-in RS232 interface and port	
13.16	Normal operating temperature range : -10°C to 40°C	
13.17	Dust cover	
13.18	Wall-mounting kit	
13.19	Internal battery holder for field operation	
13.20	Power cord	
13.21	<p>Electrical requirement:</p> <ul style="list-style-type: none"> • 208V/60Hz • CSA approved or equivalent (i.e. cUL compliant) 	
13.22	<p>Manual (English language):</p> <ul style="list-style-type: none"> • Installation, Operation/User Manual • Service Manual 	
14	Calibration weights set for high end balances, 1mg to 1kg	
14.1	<p>Set range: 1mg to 1kg:</p> <ul style="list-style-type: none"> • mg set: 1, 2, 5, 10, 20, 50, 100, 200, 500mg • g set: 1, 2, 5, 10, 20, 50, 100, 200, 500g • kg set: 1kg 	

14.2	<p>Construction:</p> <ul style="list-style-type: none"> • High grade stainless steel • 8kg/dm³ density • Electro-polished high gloss finish • One-piece construction • Cylindrical with handling knob 	
14.3	E2 Class (as of OIML R111-1:2004)	
14.4	Calibration certificate by ISO/IEC 17025 accredited laboratory	
14.5	<p>Carrying box:</p> <ul style="list-style-type: none"> • w/ molded insets • w/ handling tools • w/ certificate 	
14.6	<p>Manual (English language):</p> <ul style="list-style-type: none"> • Installation, Operation/User Manual • Service Manual 	
15	Calibration weights set for routine maintenance of lower end balances, 100g & 2000g	
15.1	Set weights: 100g and 2000g	
15.2	<p>Construction:</p> <ul style="list-style-type: none"> • High grade stainless steel • 7,9kg/dm³ density • Electro-polished high gloss finish • Cylindrical with handling knob 	
15.3	ASTM Class 1 grade	
15.4	Calibration certificate by ISO/IEC 17025 accredited laboratory	
15.5	<p>Carrying box:</p> <ul style="list-style-type: none"> • w/ molded insets • w/ handling tools 	
15.6	<p>Manual (English language):</p> <ul style="list-style-type: none"> • Installation, Operation/User Manual • Service Manual 	

STREAM 3 – ANALYZER and INCUBATOR

	<p><u>Completion and submission of Mandatory Performance Specification is required to be considered responsive and for your offer to be given further consideration.</u></p> <p>e. Bidder must cross reference where in their technical offer, the performance specification is located.</p> <p>f. Provide the specification being offered which meets or exceeds <u>and cross-reference as to where the supporting documentation is found within your proposal.</u> If there is insufficient space in the table, assign SIR # (Supplementary Information Reference) and provide the appropriate details on a separate page in your offer. Where published supporting documentation is not available in the form of brochures, technical data sheets etc., prepare a written narrative complete with a detailed explanation of how its offer demonstrates compliance.</p>	
	<p><u>All work and materials herein specified must meet and maintain minimum Canadian and Provincial certification(s) and approval(s) as applicable by Industry Standards.</u></p>	
Item	Specifications	Bidder Response: indicate how they meet the specifications addressed below/ cross-reference where this technical specification is indicated in their bid documentation
16	Direct Mercury Analyzer (DMA) with autosampler	
16.1	Dimensions: <ul style="list-style-type: none"> Width: 800mm ±100mm (w/o accessories) Depth: 450mm ±50mm Height: 325mm ±50mm 	
16.2	Built for field operation, mobile or stationary laboratory	
16.3	Direct Mercury determination system that does not require sample digestion or any chemical pre-treatment	
16.4	Built-in, integrated and automated systems for: <ul style="list-style-type: none"> Drying Heat decomposing Gold amalgamation of Mercury Mercury evaporation from amalgator Absorbance determination Mercury trapping 	
16.5	Sample management: <ul style="list-style-type: none"> Completely programmable 	

	<ul style="list-style-type: none"> • Accept solid samples <ul style="list-style-type: none"> ○ Sample size range: up to 2,0g ±10% or better • Accept liquid samples <ul style="list-style-type: none"> ○ Sample volume: up to 1,500 µl ±10% or better • w/ built-in autosampler <ul style="list-style-type: none"> ○ Minimum 40 ±5 positions ○ Samples must be protected from dust and cross-contamination 	
16.6	Drying and Decomposition: <ul style="list-style-type: none"> • Must be thermocouple driven • Heating must be gradual (to avoid boiling, spills and loss of sample) 	
16.7	Spectrophotometer: <ul style="list-style-type: none"> • Triple cell configuration • Spectrometer cells working range: <ul style="list-style-type: none"> ○ Ultra-trace range: 0-10ng ○ High sensitivity range: 10-20ng ○ Low sensitivity range: 20-1000ng • Reproducibility: <1,5% • Sample pre-concentration NOT required • Electronic detector shutters required • Mercury lower detection limit: 0,0015ng ±10% or better 	
16.8	Operating system: <ul style="list-style-type: none"> • NOT Windows® based but PC (Windows®) compatible • Touch screen autonomous controller and interface • Fully compatible w/ standard peripherals (mouse, keyboard, printer, USB memory, etc...) • Data from acquisition and analysis are fully transferable to PC • Data from acquisition and analysis are fully exportable 	
16.9	Instrument software: <ul style="list-style-type: none"> • Programmable and pre-programmed methods • Multiple and programmable calibration curves • Data validation vs stored calibration curves • Autoblank function enabled • Allow real-time viewing of absorbance results • Sample concentration in ppb or ppm • Recording of temperature profiles • All program parameters must be available and exportable for each sample • Provide statistical analysis per sample or group of samples 	

16.10	Compliance w/:	
	<ul style="list-style-type: none"> • ASTM method D-6722-01 and D7623-10 • ASTM method D7623-10 • US EPA method 7473 • CSA approved and/or cUL equivalent 	
16.11	Electrical requirement:	
	<ul style="list-style-type: none"> • 120V/60Hz/single phase 	
16.12	Mandatory Accessories: must come with:	
	<ul style="list-style-type: none"> • One (1) Control and acquisition station/terminal • Nickel sample boat starter kit, minimum 80units • Quartz sample boat starter kit, minimum 80units • One (1) Mercury trap replacement • One (1) photo-detector replacement 	
16.13	Manual (English language):	
	<ul style="list-style-type: none"> • Installation, Operation/User Manual • Service Manual 	
17	37°C stackable dry incubator	
17.1	Dry incubation	
17.2	Min. 170 L (6 cu. ft.) chamber volume	
17.3	Temperature range includes 5°C above ambient to 105°C	
17.4	2 shelves	
17.5	Exterior dimensions: 640 mm W x 740 mm D x 960 mm H ± 50 mm for all dimensions (25" W x 36" D x 29" H ± 2")	
17.6	Connects to NEMA 5-15P 120V/60Hz/15A receptacle	
17.7	Convection system	
17.8	Capable of operating 24h/day	
17.9	Manual (English language):	
	<ul style="list-style-type: none"> • Installation, Operation/User Manual • Service Manual 	

STREAM 4 –SHAKERS

<p><u>Completion and submission of Mandatory Performance Specification is required to be considered responsive and for your offer to be given further consideration.</u></p> <p>g. Bidder must cross reference where in their technical offer, the performance specification is located.</p> <p>h. Provide the specification being offered which meets or exceeds <u>and cross-reference as to where the supporting documentation is found within your proposal.</u> If there is insufficient space in the table, assign SIR # (Supplementary Information Reference) and provide the appropriate details on a separate page in your offer. Where published supporting documentation is not available in the form of brochures, technical data sheets etc., prepare a written narrative complete with a detailed explanation of how its offer demonstrates compliance.</p>		
<p><u>All work and materials herein specified must meet and maintain minimum Canadian and Provincial certification(s) and approval(s) as applicable by Industry Standards.</u></p>		
Item	Specifications	Bidder Response: indicate how they meet the specifications addressed below/ cross-reference where this technical specification is indicated in their bid documentation
18	Refrigerator Incubator Shaker, with 18 x 18 in universal platform	
18.1	External dimensions: <ul style="list-style-type: none"> • Width: 600mm ±50mm • Depth: 900mm ±50mm • Height: 550mm ±25mm (w/ lid closed) 	
18.2	Lid: <ul style="list-style-type: none"> • Hinged • Transparent • w/ safety interlock 	
18.3	Orbit diameter: 19mm ±3mm	
18.4	Orbit speed range: 15-500rpm ±25rpm	
18.5	Loading capacity: 22.5kg ±2.5kg	

18.6	<p>Digital operating system:</p> <ul style="list-style-type: none"> • Dual programmable time range : 6min to 999hours & 6sec to 999min • Temperature range: -15°C to 60°C ±5°C <ul style="list-style-type: none"> ○ Chamber temperature accuracy: ± 0.1°C at 37°C • Unbalanced load sensor w/automated shut down mechanism 	
18.7	<p>LED display:</p> <ul style="list-style-type: none"> • Speed • Time • Temperature <ul style="list-style-type: none"> ○ Visual/audible temperature alarm 	
18.8	<p>Electrical requirement:</p> <ul style="list-style-type: none"> • 120V/60Hz • CSA approved and/or cUL compliant 	
18.9	<p>Mandatory accessories: must come with:</p> <ul style="list-style-type: none"> • One (1) Universal platform • Holders: <ul style="list-style-type: none"> ○ Two (2) microplate holders ○ Two (2) 1,5ml microcentrifuge tube rack holders ○ Two (2) 10-13mmDia test tube rack holders ○ Two (2) 14-16mmDia test tube rack holders ○ Two (2) 26-30mmDia test tube rack holders ○ Four (4) holders for 250ml erlenmeyer flasks ○ Four (4) holders for 500ml erlenmeyer flasks ○ Four (4) holders for 1000ml erlenmeyer flasks ○ Four (4) holders for 2000ml erlenmeyer flasks • One (1) replacement drive belt, if it applies 	
18.10	<p>Manual (English language):</p> <ul style="list-style-type: none"> • Installation, Operation/User Manual • Service Manual 	
19	Shaker, vortex type	
19.1	Variable speed: 600 to 3200 rpm	
19.2	75 mm platform and single tube cup	
19.3	With "touch" or continuous shaking switch	
19.4	External Dimensions: 122 mm W x 165 mm D x 165 mm H ± 25 mm for all dimensions (4.8" W x 6.5" D x 6.5" H ± 1")	

19.5	Electrical requirements: 120V/60Hz	
20	Shaker, rocking platform	
20.1	With digital timer from 1 min to 99hr59min	
20.2	Speed control: 5-100 rpm	
20.3	Minimum rocking angle 7° to 13°	
20.4	Platform dimensions: 276 mm x 276 mm ± 25 mm (11" x 11" ± 1")	
20.5	Maximum load of at least 5 kg	
20.6	Universal rubber tray with bands to secure samples	
20.7	Electrical requirements: 110-120V/60Hz	
21	Shaker, orbital	
21.1	Speed control: 8-100 rpm	
21.2	Minimum rocking angle 7° to 13°	
21.3	Platform dimensions: 276 mm x 276 mm ± 25 mm (11" x 11" ± 1")	
21.4	Maximum load of at least 5 kg	
21.5	Universal rubber tray with bands to secure samples	
21.6	Electrical requirements: 110-120V/60Hz	
22	Shaker, rotating, with 2ml-15ml-50ml tube holder	
22.1	Rotating bar	
22.2	Rotation: 360°	
22.3	Up to 70 oscillations per minute with minimum 300°	
22.4	Up to 8 rpm rotation	
22.5	Capacity: 32 clips for 10-19 mm tubes	
22.6	External Dimensions: 102 mm W x 469 mm D x 152 mm H ± 25 mm for all dimensions (4. W x 18.5" D x 6" H ± 1")	
22.7	Electrical requirements: 110-120V/60Hz	

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ANNEX "B" – BASIS OF PAYMENT

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid firm unit prices. Customs duties are included. Applicable Taxes are extra, if applicable, and to be shown as a separate item on any resulting invoice.

Pricing must be firm (Canadian) unit price all costs associated with providing the requirement in accordance with requirement at Annex A, FOB destination.

Pricing must be in Canadian funds.

FOB Destination: Wills Transfer Ltd.
 3100 Swansea Crescent
 Ottawa, ON. K1G 3W4
 (613) 744-0970 ext. 201
 c/o Claudette Weedmark

Delivery for all items must be received at Wills Transfer Ltd on or before March 31, 2017.

Item	Description	Qty	Unit of Issue	Unit Price	Extended Price CND
Steam 1 – Centrifuges (responsive bids will be evaluated on an item by item basis)					
1	<p>Centrifuge, micro, refrigerated, with rotors in accordance with the mandatory performance specifications detailed in Annex A – Requirement.</p> <p>All inclusive pricing including freight and offloading charges, FOB Destination to Wills Transfer Ltd., Ottawa, Ontario.</p> <p>Model Number: _____</p>	10	each	\$	\$
2	<p>Centrifuge, table-top, non-refrigerated, with rotors and adaptors in accordance with the mandatory performance specifications detailed in Annex A – Requirement.</p> <p>All inclusive pricing including freight and offloading charges, FOB Destination to Wills Transfer Ltd., Ottawa, Ontario.</p> <p>Model Number: _____</p>	4	each	\$	\$

3	<p>Fixed angled rotor sets (<u>must be compatible with line item 2 - Centrifuge, table-top, non-refrigerated, w/rotors and adaptors</u>) in accordance with the mandatory performance specifications detailed in Annex A – Requirement.</p> <p>All inclusive pricing including freight and offloading charges, FOB Destination to Wills Transfer Ltd., Ottawa, Ontario.</p>	1	Complete set as described in Annex A, line item 2	\$	\$
4	<p>Centrifuge, table-top, refrigerated, with rotors and adaptors in accordance with the mandatory performance specifications detailed in Annex A – Requirement.</p> <p>All inclusive pricing including freight and offloading charges, FOB Destination to Wills Transfer Ltd., Ottawa, Ontario.</p> <p>Model Number: _____</p>	5	each	\$	\$
5	<p>Fixed angled rotor sets (<u>must be compatible with line item 4 - Centrifuge, table-top, refrigerated, w/rotors and adaptors</u>) in accordance with the mandatory performance specifications detailed in Annex A – Requirement.</p> <p>All inclusive pricing including freight and offloading charges, FOB Destination to Wills Transfer Ltd., Ottawa, Ontario.</p>	1	Complete set as described in Annex A, line item 5	\$	\$
6	<p>Centrifuge Evaporator in accordance with the mandatory specifications detailed in Annex A – Requirement.</p> <p>All inclusive pricing including freight and offloading charges, FOB Destination to Wills Transfer Ltd., Ottawa, Ontario.</p> <p>Model Number: _____</p>	2	each	\$	\$

7	<p>Centrifuge, micro, non refrigerated, w/ rotors in accordance with the mandatory performance specifications detailed in Annex A – Requirement.</p> <p>All inclusive pricing including freight and offloading charges, FOB Destination to Wills Transfer Ltd., Ottawa, Ontario.</p> <p>Model Number: _____</p>	1	each	\$	\$
8	<p>Centrifuge, mini-micro, non-refrigerated in accordance with the mandatory specifications detailed in Annex A – Requirement.</p> <p>All inclusive pricing including freight and offloading charges, FOB Destination to Wills Transfer Ltd., Ottawa, Ontario</p> <p>Model Number: _____</p>	2	each	\$	\$
<p>Steam 2 – Balances (responsive bids will be evaluated on an item by item basis)</p>					
9	<p>Balance, analytical, dual range, semi-micro, very high precision, capacity 81g/220g, readability 0.01mg/0.1mg in accordance with the mandatory performance specifications detailed in Annex A – Requirement.</p> <p>All inclusive pricing including freight and offloading charges, FOB Destination to Wills Transfer Ltd., Ottawa, Ontario</p> <p>Model Number: _____</p>	1	each	\$	\$
10	<p>Balance, high precision, capacity 510g, readability 1mg in accordance with the mandatory performance specifications detailed in Annex A – Requirement.</p> <p>All inclusive pricing including freight and offloading charges, FOB Destination to Wills Transfer Ltd., Ottawa, Ontario</p> <p>Model Number: _____</p>	1	each	\$	\$

11	<p>Balance, laboratory grade, capacity 2100g, readability 10mg in accordance with the mandatory performance specifications detailed in Annex A – Requirement.</p> <p>All inclusive pricing including freight and offloading charges, FOB Destination to Wills Transfer Ltd., Ottawa, Ontario</p> <p>Model Number: _____</p>	6	each	\$	\$
12	<p>Balance, educational grade, capacity 2200g, readability 0.1g in accordance with the mandatory performance specifications detailed in Annex A – Requirement.</p> <p>All inclusive pricing including freight and offloading charges, FOB Destination to Wills Transfer Ltd., Ottawa, Ontario</p> <p>Model Number: _____</p>	4	each	\$	\$
13	<p>Balance, industrial grade, capacity 30kg, w/ washable weighing platform in accordance with the mandatory performance specifications detailed in Annex A – Requirement.</p> <p>All inclusive pricing including freight and offloading charges, FOB Destination to Wills Transfer Ltd., Ottawa, Ontario</p> <p>Model Number: _____</p>	1	each	\$	\$
14	<p>Calibration weights set for high end balances, 1mg to 1kg in accordance with the mandatory performance specifications detailed in Annex A – Requirement.</p> <p>All inclusive pricing including freight and offloading charges, FOB Destination to Wills Transfer Ltd., Ottawa, Ontario</p>	1	each	\$	\$

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15	<p>Calibration weights set for routine maintenance of lower end balances, 100g & 2000g in accordance with the mandatory performance specifications detailed in Annex A – Requirement.</p> <p>All inclusive pricing including freight and offloading charges, FOB Destination to Wills Transfer Ltd., Ottawa, Ontario</p>	1	each	\$	\$
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**Steam 3 – Analyzer and Incubator
 (responsive bids will be evaluated on an item by item basis)**

16	<p>Direct Mercury Analyzer (DMA) with autosampler in accordance with the mandatory performance specifications detailed in Annex A – Requirement.</p> <p>All inclusive pricing including freight and offloading charges, FOB Destination to Wills Transfer Ltd., Ottawa, Ontario</p> <p>Model Number: _____</p>	2	each	\$	\$
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17	<p>37°C stackable dry incubator in accordance with the mandatory performance specifications detailed in Annex A – Requirement.</p> <p>All inclusive pricing including freight and offloading charges, FOB Destination to Wills Transfer Ltd., Ottawa, Ontario</p> <p>Model Number: _____</p>	2	each	\$	\$
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**Steam 4 – Shakers
 (responsive bids will be evaluated on an item by item basis)**

18	<p>Refrigerator Incubator Shaker, with 18 x 18 in universal platform in accordance with the mandatory performance specifications detailed in Annex A – Requirement.</p> <p>All inclusive pricing including freight and offloading charges, FOB Destination to Wills Transfer Ltd., Ottawa, Ontario</p> <p>Model Number: _____</p>		each	\$	\$
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19	<p>Shaker, vortex type in accordance with the mandatory performance specifications detailed in Annex A – Requirement.</p> <p>All inclusive pricing including freight and offloading charges, FOB Destination to Wills Transfer Ltd., Ottawa, Ontario</p> <p>Model Number: _____</p>	10	each	\$	\$
20	<p>Shaker, rocking platform in accordance with the mandatory performance specifications detailed in Annex A – Requirement.</p> <p>All inclusive pricing including freight and offloading charges, FOB Destination to Wills Transfer Ltd., Ottawa, Ontario</p> <p>Model Number: _____</p>	8	each	\$	\$
21	<p>Shaker, orbital in accordance with the mandatory performance specifications detailed in Annex A – Requirement.</p> <p>All inclusive pricing including freight and offloading charges, FOB Destination to Wills Transfer Ltd., Ottawa, Ontario</p> <p>Model Number: _____</p>	4	each	\$	\$
22	<p>Shaker, rotating, with 2ml-15ml-50ml tube holder in accordance with the mandatory performance specifications detailed in Annex A – Requirement.</p> <p>All inclusive pricing including freight and offloading charges, FOB Destination to Wills Transfer Ltd., Ottawa, Ontario</p> <p>Model Number: _____</p>	4	each	\$	\$

Financial Evaluation:

The responsive bid with the lowest evaluated price on an item by item basis will be recommended for award of a contract.

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ANNEX "C" - ELECTRONIC PAYMENT INSTRUMENTS

The Bidder accepts any of the following Electronic Payment Instrument(s):

Direct Deposit (Domestic and International)