



## RETURN BIDS TO:

## RETOURNER LES SOUMISSIONS À:

Public Works and Government Services Canada  
ATB Place North Tower  
10025 Jasper Ave./10025 ave. Jasper  
5th floor/5e étage  
Edmonton  
Alberta  
T5J 1S6  
Bid Fax: (780) 497-3510

## 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

### 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  
ATB Place North Tower  
10025 Jasper Ave./10025 ave Jasper  
5th floor/5e étage  
Edmonton  
Alberta  
T5J 1S6

<b>Title - Sujet</b> Spectrometer	
<b>Solicitation No. - N° de l'invitation</b> 23137-190149/A	<b>Date</b> 2018-08-03
<b>Client Reference No. - N° de référence du client</b> 23137-190149	
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$EDM-064-11419	
<b>File No. - N° de dossier</b> EDM-8-41056 (064)	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2018-09-17</b>	<b>Time Zone</b> <b>Fuseau horaire</b> Mountain Daylight Saving Time MDT
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Scott, Dallas	<b>Buyer Id - Id de l'acheteur</b> edm064
<b>Telephone No. - N° de téléphone</b> (780) 224-7200 ( )	<b>FAX No. - N° de FAX</b> (780) 497-3510
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> DEPARTMENT OF NATURAL RESOURCES 5320 - 122ND ST Northern Forestry Centre EDMONTON Alberta T6H3S5 Canada	

Instructions: See Herein

Instructions: Voir aux présentes

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

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**TITLE: SPECTROMETER**

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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 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.

### **1.3 Trade Agreements**

The requirement is subject to the provisions of the North American Free Trade Agreement (NAFTA) and the Canadian Free Trade Agreement (CFTA).

### **1.4 epost Connect service**

This bid solicitation allows bidders to use the epost Connect service provided by Canada Post Corporation to transmit their bid electronically. Bidders must refer to Part 2 entitled Bidder Instructions, and Part 3 entitled Bid Preparation Instructions, of the bid solicitation, for further information.

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## 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) (<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](#) (2018-05-22), Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

### 2.2 Submission of Bids

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

<u>BRU:</u>	Western Region Bid Receiving Unit (Edmonton)
<u>Address:</u>	5th Floor, ATB Place Tower, 10025 Jasper Avenue Edmonton, AB T5J 1S6
<u>E-post Connect:</u>	<a href="mailto:ROReceptionSoumissions.WRBidReceiving@tpsgc-pwgsc.gc.ca">ROReceptionSoumissions.WRBidReceiving@tpsgc-pwgsc.gc.ca</a> Bids/Offer will be not be accepted if emailed directly to this email address. This email is to initiate an ePost Connect conversation, as detailed in the Standard Instructions.
<u>Bid Fax:</u>	780-497-3510

### 2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than ten (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.

Solicitation No. - N° de l'invitation  
23137-190149/A  
Client Ref. No. - N° de réf. du client  
23137-190149

Amd. No. - N° de la modif.  
File No. - N° du dossier  
EDM-8-41056

Buyer ID - Id de l'acheteur  
EDM064  
CCC No./N° CCC - FMS No./N° VME

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## **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 Alberta.

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.

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## PART 3 - BID PREPARATION INSTRUCTIONS

### 3.1 Bid Preparation Instructions

If the Bidder chooses to submit its bid electronically, Canada requests that the Bidder submits its bid in accordance with section 08 of the 2003 standard instructions. Bidders must provide their bid in a single transmission. The epost Connect service has the capacity to receive multiple documents, up to 1GB per individual attachment.

The bid must be gathered per section and separated as follows:

Section I: Technical Bid  
Section II: Financial Bid  
Section III: Certifications  
Section IV: Additional Information

If the Bidder chooses to submit its bid in hard copies, Canada requests that the Bidder submits its bid in separately bound sections as follows:

Section I: Technical Bid (one [1] hard copy OR one [1] fax copy)

Section II: Financial Bid (one [1] hard copy OR one [1] fax copy)

Section III: Certifications (one [1] hard copy OR one [1] fax copy)

Section IV: Additional Information (one [1] hard copy OR one [1] fax copy)

If there is a discrepancy between the wording of the soft copy on electronic media and the hard copy, the wording of the hard copy will have priority over the wording of the soft copy.

If the Bidder is simultaneously providing copies of its bid using multiple acceptable delivery methods, and if there is a discrepancy between the wording of any of these copies and the electronic copy provided through epost Connect service, the wording of the electronic copy provided through epost Connect service will have priority over the wording of the other copies.

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 hard copy 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](https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32573) (<https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32573>). 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.

### **3.1.1 Electronic Payment of Invoices – Bid**

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

If Annex "D" 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**

MINIMUM MANDATORY PERFORMANCE SPECIFICATIONS are included in Annex "C", Evaluation Criteria.

#### **4.1.2 Financial Evaluation**

In Annex 'B', Basis of Payment the Firm Unit Prices for Item 1, Item 2, Item 3, and Item 4 will be added together to obtain the Total Evaluated Bid Price.

SACC *Manual* Clause [A0222T](#) (2014-06-26), Evaluation of Price

### **4.2 Basis of Selection**

#### **4.2.1 Basis of Selection - Mandatory Technical Criteria**

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 will be recommended for award of a contract.



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## 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 Integrity Provisions of the Standard Instructions, all bidders must provide with their bid, **if applicable**, the declaration form available on the [Forms for the Integrity Regime](http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html) website (<http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html>), 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 section titled Information to be provided when bidding, contracting or entering into a real procurement agreement of 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](https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#) website (<https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#>).

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.

## **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 one (1) Inductively Coupled Plasma Optical Emission Spectrometer (ICP OES) system including components and accessories in accordance with 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](#) (2018-06-21), 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 2018-11-30.

#### **6.4.2 Delivery Points**

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

## 6.5 Authorities

### 6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Dallas Scott  
Procurement Officer  
Public Services and Procurement Canada  
Acquisitions Branch  
Western Region

ATB Place, North Tower  
5<sup>th</sup> Floor, 10025 – Jasper Avenue  
Edmonton, AB T5J 1S6

Telephone: 780 – 224 – 7200  
Facsimile: 780 – 497 – 3510  
E-mail address: [dallas.scott@pwgsc-tpsgc.gc.ca](mailto:dallas.scott@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:

(To be named in the contract)

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

(To be completed by the bidder)

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Organization: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Telephone: \_\_\_\_\_  
Facsimile: \_\_\_\_\_  
E-mail address: \_\_\_\_\_

## 6.6 Payment

### 6.6.1 Basis of Payment - Firm Unit Price(s)

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid firm unit price(s), as specified in Annex "B" for a cost of \$ \_\_\_\_\_ (*inserted at contract award*). 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 Method of Payment

SACC Manual clause [H1001C](#) (2008-05-12), Multiple Payments

### 6.6.3 SACC Manual Clauses

[C2000C](#) (2007-11-30), Taxes - Foreign-based Contractor

[C2604C](#) (2013-04-25), Customs Duties, Excise Taxes and Applicable Taxes – Non resident

### 6.6.4 Electronic Payment of Invoices – Contract

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

- a. Visa Acquisition Card;
- b. MasterCard Acquisition Card;
- c. Direct Deposit (Domestic and International);
- d. Electronic Data Interchange (EDI);
- e. Wire Transfer (International Only);
- f. Large Value Transfer System (LVTS) (Over \$25M)

## 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.
  - b. One (1) copy must be forwarded to the Contracting Authority identified under the section entitled "Authorities" of the Contract.

## **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.

## **6.9 Applicable Laws**

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

## **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 (2018-06-21), General Conditions - Goods (Medium Complexity);
- (c) Annex "A", Requirement;
- (d) Annex "B", Basis of Payment;
- (e) the Contractor's bid dated \_\_\_\_\_.

## **6.11 Insurance - No Specific Requirement**

SACC Manual Clause G1005C (2016-01-28), Insurance - No Specific Requirement

## **6.12 SACC Manual Clauses**

B7500C (2006-06-16), Excess Goods

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## **ANNEX "A"**

### **REQUIREMENT**

#### **1. BACKGROUND**

The Northern Forestry Centre Analytical Services Laboratory (NoFC ASL) is looking to replace their Inductively Coupled Plasma Optical Emission Spectrometer (ICP OES) system that has been in use for close to 20 years and requires replacement. The new system must be a bench top model that will be used for both low and high level detection of elements in plant, soil and water matrices.

Many of the samples analyzed by the new system will be soil extracts and therefore it is necessary that the system be capable of handling samples with up to 30% total dissolved solids without loss of sensitivity or accuracy. To maintain high sample throughput it is important that these samples do not require dilution prior to analysis.

The new ICP OES will also be utilized for testing surface and subsurface waters, environmental samples and nutrient assessments for the purpose of supporting research at the Northern Forestry Centre.

#### **2. REQUIREMENT**

The Northern Forestry Centre Analytical Services Laboratory (NoFC ASL) has a requirement for the supply, delivery, installation and training of one (1) Inductively Coupled Plasma Optical Emission Spectrometer (ICP OES) system including components and accessories. There is no requirement for an auto sampler to be supplied with the system.

#### **3. SYSTEM**

The automatic simultaneous ICP OES must have a plasma viewing window for operators to view the plasma both radially and axially. As well it must have software controlled plasma ignition and automatic shutdown and software control of plasma, nebulizer and auxiliary gases as well as provide for control of additional gas (i.e. oxygen).

It is important for different method applications that the sample introduction system be an open architecture so that it will allow for the interchanging of nebulizers, spray chambers and torch.

The system must have a Paschen-Runge design polychromator. This is important for the following reasons:

- (i) it utilizes 1<sup>st</sup> order light which results in higher sensitivity throughout the spectra.
- (ii) is capable of maintaining constant resolution of 8.5 picometers from 130 to 340 nm
- (iii) it has wavelength range of 130 to 770 nm
- (iv) it has superior limits of detection without the need for hydride generation (see Table)

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**Limits of Detection**

	<b>Wavelength (nm)</b>	<b>LOD (ug/L)</b>
<b>Al</b>	167.076	0.05
<b>As</b>	189.042	1.0
<b>Cl</b>	134.724	30
<b>Hg</b>	184.950	0.6
<b>P</b>	177.495	0.85
<b>Pb</b>	168.215	0.95
<b>S</b>	180.731	2.0
<b>Se</b>	196.090	1.3
<b>Zn</b>	213.856	0.055

The detector(s) must have a dynamic range of up to nine (9) orders of magnitude of concentration range and have full spectrum access.

The RF generator must be a solid state design and able to tolerate a change from aqueous samples to volatile organic solvents without affecting plasma stability.

The system software must come preloaded on a PC with Windows 10 operating system. The software must also be supplied on CD or USB. The software must be capable of providing statistical data for each spectral scan and allow for data export to MS Excel 2016. The software must contain a library of analytical lines which have all the major wavelengths for all elements.

**4. DELIVERY**

The Contractor must contact the Project Authority a minimum of seven (7) calendar days prior to delivery to allow for sufficient time to prepare designated space and arrange for necessary unloading equipment.

**5. INSTALLATION**

On-site Installation of the ICP OES must be performed by a qualified service technician.

**6. TRAINING**

On-site user training course for at least two (2) consecutive days must be included for up to two (2) operators. All costs associated with the on-site training must be included in the price.

Training must be conducted following setup and installation of the system.



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## 7. WARRANTY AND SERVICE

The Contractor must include a minimum of one (1) year parts and labour warranty that provides both on-site as well as phone support.

The warranty must include the instrument and parts, computer system, software, interfaces and cables.

Service must include: technical support; technical phone support; online support; and support via an email-back document system.

A qualified service technician must reply by phone within twenty-four (24) hours of a call and / or an on-site repair / replacement of components within a forty-eight (48) hour period, five (5) days a week.

Trained application consultants must be available to discuss customized applications support. The application consultant must be capable of on-site visits at the contractor's expense for a period of one (1) year. The one (1) year period will commence on the day of instrument delivery and acceptance. Application consultants must be available for contact by phone for the lifetime of the instrument.

The Contractor must provide all software updates and new releases for a period of minimum one (1) year following the acceptance, at no additional cost.

## ANNEX "B"

### BASIS OF PAYMENT

- Prices must be firm
- Prices must be all inclusive and include any and all applicable charges
- Prices must be in Canadian Dollars (CAD)
- Prices do not include applicable taxes, applicable taxes will be added as a separate line item to any invoice issued as a result of a Contract
- Prices are required for Item 1, 2, 3, 4 and must be in accordance with the format shown in the table below

### DELIVERY LOCATION

- Northern Forestry Center  
5320 – 122 Street NW  
Edmonton, Alberta T6H 3S5

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>	<u>FIRM UNIT PRICE</u>
<b>1</b>	Inductively Coupled Plasma Optical Emission Spectrometer system with components and accessories in accordance with Annex "A", Requirement and Annex "C", Evaluation Criteria	1	\$_____ CAD
<b>2</b>	Delivery charges of Inductively Coupled Plasma Optical Emission Spectrometer system with components and accessories to DELIVERY LOCATION – Free on Board (FOB) Destination, Delivery Duty Paid (DDP), including all applicable Customs Duties and Excise Taxes	1	\$_____ CAD
<b>3</b>	Installation of Inductively Coupled Plasma Optical Emission Spectrometer system with components and accessories to DELIVERY LOCATION in accordance with Annex "A", Requirement	1	\$_____ CAD
<b>4</b>	Training of Inductively Coupled Plasma Optical Emission Spectrometer system with components and accessories in accordance with Annex "A", Requirement	1	\$_____ CAD
<b>TOTAL EVALUATED BID PRICE</b> (ITEM 1 + ITEM 2 + ITEM 3 + ITEM 4)			\$_____ CAD

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## ANNEX "C"

### EVALUATION CRITERIA

#### 1. DELIVERY

All deliverables identified in Annex "A", Requirement (supply, delivery, installation, and training) must be completed on or before 2018-11-30.

PLEASE INDICATE:  
(TO BE COMPLETED BY BIDDER)

☐ Meet Delivery Requirement

OR

☐ Unable to Meet Delivery Requirement

PLEASE INDICATE:  
(TO BE COMPLETED BY BIDDER)

The best delivery date for all deliverables identified in Annex "A", Requirement that can be offered is \_\_\_\_\_ business days / calendar days / weeks / months after Contract award.

#### 2. MINIMUM MANDATORY PERFORMANCE SPECIFICATIONS

##### COMPLIANCE MATRIX – MINIMUM MANDATORY PERFORMANCE SPECIFICATIONS

A complete list of the minimum mandatory performance specifications are detailed below in the "Compliance Matrix". Bidders are to clearly demonstrate compliance with each mandatory specification.

1. Bidders **must** show compliance by addressing each performance specification in the Compliance Matrix, whether the product offered "meets" or "does not meet".
2. It is requested that supporting technical documentation, including but not limited to, specification sheets, technical brochures, photographs or illustrations be provided with the bid at solicitation close and be cross-referenced on the Compliance Matrix for each performance specification to outline where in the supporting technical documentation it demonstrates compliance. It is the Bidders responsibility to ensure that the submitted supporting technical documentation provides detail to prove that the proposed product(s) meet the requirements of the Performance Specification. If published supporting technical document 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 supporting documentation referenced above has not been provided at bid closing, the Contracting Authority will notify the Bidder that they must provide supporting documentation within two (2) business days following notification. Failure to comply with the request of the Contracting Authority within that time period, will deem the bid non-responsive and the bid will be given no further consideration.
4. Bidders must address any concerns with the performance specifications in written detail to the Contracting Authority before bid closing as outlined in the solicitation document.
5. Failure to meet each performance specification will result in the bid being deemed non-responsive, and be given no further consideration.

**COMPLIANCE MATRIX – MINIMUM MANDATORY PERFORMANCE SPECIFICATIONS:**

REQUIREMENT	MANUFACTURER OFFERED	MODEL NUMBER OFFERED
Inductively Coupled Plasma Optical Emission Spectrometer system with components and accessories		

ITEM #	PERFORMANCE SPECIFICATION	STATUS (D) Desirable (M) Mandatory	PERFORMANCE SPECIFICATION MET? Indicate either Yes/No	PERFORMANCE SPECIFICATION OFFERED Bidder <u>should</u> indicate how they meet the performance specification by recording this information in this column	CROSS REFERENCE Bidders should cross-reference where this performance specification is indicated in their supporting documents.
<b>1)</b>	<b>General</b>				
a)	System must be an automatic simultaneous measuring optical emission spectrometer with an inductively coupled plasma excitation source	M			
b)	System must have the ability for both radial and axial viewing of the plasma, plasma must be viewable to the operator through a viewing window	M			
c)	Plasma ignition must be software controlled and must be capable to shut down automatically after a run	M			
d)	Published comprehensive user manual (English and French) must be included	M			
e)	System cooled without need for chiller	D			
<b>2)</b>	<b>Sample Introduction</b>				
a)	Instrument must be able to operate with solutions containing up to 30% total dissolved solids without dilution or without loss of sensitivity or accuracy	M			
b)	Sample introduction system must be open architecture to allow for interchanging of nebulizers, spray chambers, and torch	M			

c)	System must have demountable torch	M			
d)	System must include a 4-channel, 12 roller peristaltic pump	M			
e)	The computer must be capable of controlling the plasma, nebulizer and auxiliary gases as well as provide for control of additional gas (i.e. oxygen)	M			
<b>3) Auto Sampler</b>					
a)	System and software must be 100% compatible with existing ESI 4DX auto sampler	M			
<b>4) Optics</b>					
a)	The system must have a Paschen-Runge design polychromator	M			
<b>5) Detector</b>					
a)	Detector(s) must consist of charged coupled devices or equivalent for converting various wavelengths into digital signal	M			
b)	Detector(s) must have a dynamic range up to 9 orders of magnitude of concentration range	M			
c)	Must have full spectrum access and capability of storing complete spectra in a data file	M			
d)	Must be thermally stable	M			
<b>6) Radio Frequency Signal (RF) Generator</b>					
a)	RF generator must be a solid state design.	M			
b)	RF generator power output must range up to 1500 watts and must be fully controlled by the software	M			
c)	Must have power efficiency of minimum 80% and output stability of minimum 0.1%	M			

e)	RF generator must be able to tolerate change from volatile organic solvents to aqueous samples without affecting plasma stability, even if highly volatile organic solvents are introduced	M			
<b>7)</b>	<b>Software and Personal Computer (PC)</b>				
a)	PC supplied must have system software preinstalled	M			
b)	System software must be supplied on CD or USB	M			
c)	PC supplied must have Windows 10 preinstalled	M			
d)	PC supplied must include a wireless network adapter card	M			
e)	Laser colour printer must be supplied	M			
f)	Software must allow for full control of offered ICP OES and ESI DX 4 systems	M			
g)	Software must provide statistical data for each spectral scan	M			
h)	Software must allow for data export to Microsoft Excel 2016 and allow for connectivity to LIMS	M			
i)	Software must contain a library of analytical lines which have all the major wavelengths for all elements	M			
j)	Software must allow for cloning of developed methods and have method filters to enable the user to look at specific elements within a method	M			

Solicitation No. - N° de l'invitation  
23137-190149/A  
Client Ref. No. - N° de réf. du client  
23137-190149

Amd. No. - N° de la modif.  
File No. - N° du dossier  
EDM-8-41056

Buyer ID - Id de l'acheteur  
EDM064  
CCC No./N° CCC - FMS No./N° VME

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**ANNEX "D"**

**ELECTRONIC PAYMENT INSTRUMENTS**

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

- ☐ VISA Acquisition Card;
- ☐ MasterCard Acquisition Card;
- ☐ Direct Deposit (Domestic and International);
- ☐ Electronic Data Interchange (EDI);
- ☐ Wire Transfer (International Only);
- ☐ Large Value Transfer System (LVTS) (Over \$25M)