

# **ADVANCE CONTRACT AWARD NOTICE (ACAN)**

NRCAN - 5000063274

## **1. Advance Contract Award Notice (ACAN)**

An ACAN is a public notice indicating to the supplier community that a department or agency intends to award a contract for goods, services or construction to a pre-identified supplier, thereby allowing other suppliers to signal their interest in bidding, by submitting a statement of capabilities. If no supplier submits a statement of capabilities that meets the requirements set out in the ACAN, on or before the closing date stated in the ACAN, the contracting officer may then proceed with the award to the pre-identified supplier.

## **2. Definition of the requirement**

The Department of Natural Resources Canada (NRCAN) has a requirement for high-precision U-Pb isotopic dating and contamination-free mineral separation of critical rocks samples in support of the Targeted Geoscience Program, Phase 6 (TGI-6).

### **Tasks**

*U-Pb dating by chemical abrasion isotope dilution thermal ionization mass spectrometry (CA-ID-TIMS)*

- Separation of datable minerals (e.g., zircon, titanite, rutile, monazite, baddeleyite, perovskite) from bulk rock samples that have been collected by NRCAN scientists, and shipped to the bidder at the expense of the GSC.
- Selection of mineral grains by microscopic examination for chemical dissolution and isolation of U and Pb, and mass spectrometric analysis. Mineral separation, selection, and preparation will be undertaken with the utmost care using an isodynamic magnetic separator, heavy liquids, and chemical abrasion if appropriate (high temperature annealing and partial dissolution) or air abrasion techniques.
- Low Pb contamination chemical procedures using ultraclean facilities (0.2-0.4 picogram Pb blanks).

### **Deliverables**

- The contractor will perform contamination free, state-of-the-art mineral separation on all samples. The Geological Survey of Canada (GSC) will submit thirty (30) samples.
- The contractor will perform detailed isotopic dating on up to twenty five (25) selected samples from the original twenty six (30) submitted, assuming that some sample may not return datable mineral grains.
- The contractor will perform mineral separation procedures on the five (5) other samples submitted.
- The contractor will report preliminary results on mineral separation and initial analytical data by January 31, 2022.
- The contractor will report full and final results on both mineral separation and isotopic dating to the GSC and the Scientific Authority by March 31, 2022.

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### **Reporting Requirements**

Preliminary data, results, and interpretation will be reported to the GSC and Scientific Authority as data are acquired and no later than January 31, 2022.

A final report will be submitted to the GSC and Scientific Authority upon completion of the work on or prior to March 31, 2022. This report will contain all relevant isotopic data, such as would routinely be included in scientific papers. This includes the following:

- Description of analytical techniques and methods of data reduction
- Sample descriptions
- Description of the U-Pb results
- Tabulation of the isotopic data
- Concordia diagrams displaying the data
- Interpretations of the results that take into account discordance, inheritance, and scattering of data, and the possible effects of metamorphism and alteration on the isotopic systems.

### **3. Criteria for assessment of the Statement of Capabilities (Minimum Essential Requirements)**

Any interested supplier must demonstrate by way of a statement of capabilities that they meet the following requirements:

#### ***Statement of Capabilities***

- Have at least ten (10) years of experience within the last fifteen (15) years performing the type of work described in Section 2 above in the realm of high-precision U-Pb geochronology;
- Are able to perform contamination free mineral separation on a large suite of samples;
- Are operating in accordance with the latest standards and calibrations, including the Earth-Time calibration of standard solutions;
- Are able to perform single zircon chemical abrasion analysis with blank Pb levels routinely below 0.5 picograms;
- Are able to process the 30 samples on time and report on full results by the contract deadline of March 31, 2022;
- Have the cumulative experience among the team of laboratory scientists and technicians, accumulated over at least 15 years, and state-of-the-art capabilities as demonstrated by a publication record of peer-reviewed papers on high-precision U-Pb dating of geological samples and processes in the peer reviewed scientific literature.

#### ***Knowledge and understanding***

The selected Geochronology Laboratory should have knowledge and capability of all aspects of high-precision U-Pb geochronology, including the full variety of accessory minerals. The lab should have the capability and instrumentation to apply different dating techniques such as ID-TIMS

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(isotope dilution thermal ionization mass spectrometry) and LA-ICPMS (laser ablation inductively coupled plasma mass spectrometry) methods to acquire the U-Pb results.

### ***Academic qualifications***

The lead geochronologists in the laboratory must have Ph.D. degrees from recognized universities and have ten (10) or more years of experience performing work relevant to this requirement.

#### **4. Applicability of the trade agreement(s) to the procurement**

Trade Agreements are not applicable.

This procurement is subject to the following trade agreement(s) (*insert only the applicable trade agreement(s)*):

- Canadian Free Trade Agreement (CFTA)
- Canada-Chile Free Trade Agreement (CCFTA)
- Canada-Colombia Free Trade Agreement (CCoFTA)
- Canada-Honduras Free Trade Agreement (CHFTA)
- Canada-Korea Free Trade Agreement
- Canada-Panama Free Trade Agreement (CPaFTA)
- Canada-Peru Free Trade Agreement (CPFTA)

#### **5. Justification for the Pre-Identified Supplier**

The supplier mentioned in section 11 below is the only known supplier that meets the mandatory criteria set out in section 3 above.

Should Canada receive a statement of capabilities from a supplier that contains sufficient information to indicate that it meets the requirements set forth in this ACAN, a competitive process will be triggered with a technical and financial evaluation methodology of the bids proposed by the potential bidders

#### **6. Government Contracts Regulations Exception(s)**

The following exception(s) to the *Government Contracts Regulations* is (are) invoked for this procurement under subsection 6(d) - only one person is capable of performing the work.

The identified supplier, ***Jack Satterly Geochronology Laboratory, at the University of Toronto***, is the only one able to meet all of the criteria identified in paragraph 3 above

#### **7. Exclusions and/or Limited Tendering Reasons**

The following exclusion(s) and/or limited tendering reasons are invoked under the:

- Canadian Free Trade Agreement (CFTA) – Article: 513.1(b) (iii);
- Canada-Chile Free Trade Agreement (CCFTA) – Article(s) Kbis-09 (b), Article Kbis-09 (c)
- Canada-Colombia Free Trade Agreement – Article(s): 1409 (b) (iii);
- Canada-Honduras Free Trade Agreement – Article(s): 17.11 2 (b) (iii)

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- Canada-Korea Free Trade Agreement – Article 14.3, Under the Revised GPA - Article XIII, 1 (b) (iii);
- Canada-Panama Free Trade Agreement – Article(s) 16.10 (b) (iii)
- Canada-Peru Free Trade Agreement (CPFTA) – Article(s)1409 (b) (iii)

### **8. Ownership of Intellectual Property**

Canada intends to retain ownership of any Foreground Intellectual Property arising out of the proposed contract on the basis that the main purpose of the contract is to generate knowledge and information for public dissemination.

### **9. Period of the proposed contract or delivery date**

The period of the contract will be from Contract Award Date to March 31, 2022.

### **10. Cost estimate of the proposed contract**

The estimated value of the contract, including option(s), is less than 210,000.00\$ plus applicable taxes.

### **11. Name and address of the pre-identified supplier**

**Jack Satterly Geochronology Laboratory, University of Toronto**  
Department of Geology, University of Toronto  
22 Russell Street  
Toronto, Ontario, CANADA  
M5S 3B1

### **12. Suppliers' right to submit a statement of capabilities**

Suppliers who consider themselves fully qualified and available to provide the goods, services or construction services described in the ACAN may submit a statement of capabilities in writing to the contact person identified in this notice on or before the closing date of this notice. The statement of capabilities must clearly demonstrate how the supplier meets the advertised requirements.

### **13. Closing date for a submission of a statement of capabilities**

The closing date and time for accepting statements of capabilities is December 10, 2021 at 2:00 p.m. EST).

### **14. Inquiries and submission of statements of capabilities**

Inquiries and statements of capabilities are to be directed to:

Marie-Josée Michaud  
418-563-6916  
[Marie-josee.michaud@nrcan-rncan.gc.ca](mailto:Marie-josee.michaud@nrcan-rncan.gc.ca)