NRCan – 5000075694

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 of High-Precision U-Pb Age Dating of rock and mineral samples in support of TGI-6 ore systems research. <u>Tasks</u>

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 to 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.
- Ultra-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 <u>up to</u> twenty five (25) selected samples from the original thirty (30) samples submitted, assuming that some samples 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.
- The contractor will report full and final results on both mineral separation and isotopic dating to the GSC and the Scientific Authority.

Reporting Requirements

Preliminary data, results, and interpretation will be reported to the GSC and Scientific Authority as data are acquired.

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A final report will be submitted to the GSC and Scientific Authority upon completion of the work. 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 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 it meets the following requirements:

Statement of Capabilities

- Have at least ten (10) years of experience within the last fifteen (15) years in 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 rock samples on time and report on full results by the contract deadlines by March 31, 2024;
- 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 an extensive publication record of peer-reviewed papers (>100) on high-precision U-Pb dating of geological samples and processes in the peer-reviewed scientific literature.

Knowledge and understanding

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

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

This procurement is subject to the following trade agreement(s)

- Canadian Free Trade Agreement (CFTA)
- World Trade Organization Agreement on Government Procurement (WTO-AGP)
- o Canada-European Union Comprehensive Economic and Trade Agreement (CETA)
- o Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)
- Canada-Chile Free Trade Agreement (CCFTA)
- o Canada-Colombia Free Trade Agreement
- o Canada-Honduras Free Trade Agreement
- Canada-Korea Free Trade Agreement
- o Canada-Panama Free Trade Agreement
- o Canada-Peru Free Trade Agreement (CPFTA)
- o Canada-Ukraine Free Trade Agreement
- Canada-United Kingdom Trade Continuity Agreement

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);
- World Trade Organization Agreement on Government Procurement (WTO-AGP) Under the Revised GPA - Article XIII, 1 (b) (iii);
- Canada-European Union Comprehensive Economic and Trade Agreement (CETA) Article(s) Article 19.12 (b) (iii)
- Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) Article(s): 15.10, 2 (b) (iii) (s)
- 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);

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- Canada-Honduras Free Trade Agreement Article(s): 17.11 2 (b) (iii)
- 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 (s1409 (b) (iii)
- Canada-Ukraine Free Trade Agreement Article 10.13 (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 May 31, 2024, with the option to extend for an additional two one-year periods.

10. Cost estimate of the proposed contract

The estimated value of the contract, including option(s), is \$ \$315,000.00 (GST/HST extra).

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, ON 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 September 13, 2023, at 2:00 p.m. EST.

14. Inquiries and statements of capabilities are to be directed to:

Anik Samson Telephone: 613-408-3462 E-mail: <u>anik.samson@nrcan-rncan.gc.ca</u>