

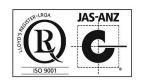
## **CERTIFICATE OF ANALYSIS FOR**

# OREAS 725b

**Graphitic Carbon Ore** 







# **TABLE OF CONTENTS**

INTRODUCTION	3
SOURCE MATERIAL	3
COMMINUTION AND HOMOGENISATION PROCEDURES	4
PHYSICAL PROPERTIES	4
MINERALOGY	4
ANALYTICAL PROGRAM	5
STATISTICAL ANALYSIS	5
Certified Values and their uncertainty intervals	
Indicative (uncertified) values	
Homogeneity Evaluation PERFORMANCE GATES	
PARTICIPATING LABORATORIES	
PREPARER AND SUPPLIER	
METROLOGICAL TRACEABILITY	
COMMUTABILITY	
INTENDED USE	
MINIMUM SAMPLE SIZE	
PERIOD OF VALIDITY & STORAGE INSTRUCTIONS	
INSTRUCTIONS FOR HANDLING & CORRECT USE	
LEGAL NOTICE	
DOCUMENT HISTORY	
CERTIFYING OFFICER	12
QMS CERTIFICATION	13
REFERENCES	13
LIST OF TABLES	
Table 1. Certified Values, Uncertainty & Tolerance Intervals for OREAS 725b	3
Table 2. Indicative Values for OREAS 725b.	3
Table 3. Physical properties of OREAS 725b.	4
Table 4. Indicative mineralogy of OREAS 725b by semi-quantitative XRD analysis	4
Table 5. Performance Gates for OREAS 725b.	7
LIST OF FIGURES	
Figure 1. C-(Graphite) by Infrared Combustion in OREAS 725b	8

Table 1. Certified Values, Uncertainty & Tolerance Intervals for OREAS 725b.

Constituent	Certified	95% Expanded Uncertainty		95% Tolerance Limits		
Constituent	Value	Low	High	Low	High	
Infrared Combustion						
C-(Graphite), Carbon, graphitic (wt.%)	25.12	24.61	25.62	24.69	25.54	

SI unit equivalents: wt.% (weight per cent) ≡ % (mass fraction).

Note: intervals may appear asymmetric due to rounding.

Table 2. Indicative Values for OREAS 725b.

Constituent	Unit	Value
O	wt.%	26.60

SI unit equivalents: wt.% (weight per cent) ≡ % (mass fraction).

Note: the number of significant figures reported is not a reflection of the level of certainty of stated values. They are instead an artefact of ORE's in-house CRM-specific LIMS.

#### INTRODUCTION

OREAS reference materials are intended to provide a low-cost method of evaluating and improving the quality of analysis of geological samples. To the geologist they provide a means of implementing quality control in analytical data sets generated in exploration from the grass roots level through to prospect evaluation, and in grade control at mining operations. To the analyst they provide an effective means of calibrating analytical equipment, assessing new techniques and routinely monitoring in-house procedures. OREAS reference materials enable users to successfully achieve process control of these tasks because the observed variance from repeated analysis has its origin almost exclusively in the analytical process rather than the reference material itself. In evaluating laboratory performance with this CRM, the section headed 'Instructions for handling and correct use' should be read carefully.

Table 1 provide the certified values and their associated 95 % expanded uncertainty and tolerance intervals, Table 2 shows indicative values, Table 3 provides some indicative physical properties, Table 4 shows indicative mineralogy by semi-quantitative XRD analysis and Table 5 presents the performance gate intervals for all certified values.

Tabulated results of all analytes together with uncorrected means, medians, standard deviations, relative standard deviations and per cent deviation of lab means from the corrected mean of means (PDM³) are presented in the detailed certification data for this CRM (OREAS 725b-DataPack.1.0.250923\_142602.xlsx). The certified values and uncertainties in this Certificate are the sole authoritative figures. Any additional significant figures in the DataPack are provided for reference only and do not affect the certified results.

Results are also presented in scatter plot for C-(Graphite) by Infrared Combustion in Figure 1, together with ±3SD (magenta) and ±5 % (yellow) control lines and certified value (green line). Accepted individual results are coloured blue and individual and dataset outliers are identified in red and violet, respectively.

## SOURCE MATERIAL

OREAS 725b is a certified reference material (CRM) prepared from a blend of granodiorite sourced from Oaklands Quarry in Tullamarine, northern Melbourne (Victoria); a high-grade synthetic graphite concentrate; and a vein-type natural graphite concentrate from central Sri Lanka.

The granodiorite is typical of Silurian granitoid units in the Melbourne Zone of Victoria. The natural graphite concentrate was derived from vein-type graphite mineralisation sourced from the Queens Graphite Mine (QGM), located in the Matale–Kurunegala Project area in central Sri Lanka. The synthetic graphite component is a fine powder sourced from a commercial supplier. It is intended to simulate natural graphite ore and enhance the carbon concentration of the CRM.

#### COMMINUTION AND HOMOGENISATION PROCEDURES

The materials constituting OREAS 725b was prepared in the following manner:

- Drying to constant mass at 105 °C;
- Crushing and multi-stage milling to >98% minus 75 microns;
- Homogenisation using OREAS' novel processing technologies;
- Packaging in 10g units in laminated foil pouches and 500g units in plastic jars.

#### PHYSICAL PROPERTIES

OREAS 725b was tested at ORE Research & Exploration Pty Ltd's onsite facility for various physical properties. Table 3 presents these findings that should be used for informational purposes only.

Table 3. Physical properties of OREAS 725b.

Bulk Density (kg/m³)	Moisture (wt.%)	Munsell Notation <sup>‡</sup>	Munsell Color‡
517	0.39	N5	Medium Gray

<sup>&</sup>lt;sup>‡</sup>The Munsell Rock Color Chart helps geologists and archeologists communicate with colour more effectively by cross-referencing ISCC-NBS colour names with unique Munsell alpha-numeric colour notations for rock colour samples.

#### MINERALOGY

The semi-quantitative XRD results shown in Table 4 below were undertaken by ALS Metallurgy in Balcatta, Western Australia. The results have been normalised to 100 % and represent the relative proportion of crystalline material. Totals greater or less than 100 % are due to rounding errors. Some amorphous material might be present . 'Clay mineral' appears to be mainly vermiculite. 'Kandite group' seems to be mainly kaolinite. A trace of talc and maghemite may be present

Table 4. Indicative mineralogy of OREAS 725b by semi-quantitative XRD analysis.

Mineral / Mineral Group	% (mass ratio)
Clay mineral	< 1
Chlorite	1
Kandite group	< 1
Annite - biotite - phlogopite	35
Muscovite	1
Plagioclase	12
K-feldspar	6
Cordierite	1
Quartz	22
Apatite group	< 1
Graphite	21

COA-1971-OREAS 725b-R0 Page: 4 of 14

#### ANALYTICAL PROGRAM

Nineteen commercial analytical laboratories participated in the program to characterise Total Graphitic Carbon (TGC) by hydrochloric acid digestion to remove carbonates followed by roasting at approx. 425 °C to remove organic carbon, the residue is then determined by infrared combustion furnace.

For the round robin program six 800 g test units were taken at predetermined intervals during the bagging stage, immediately following final blending and are considered representative of the entire batch. The six samples received by each laboratory were obtained by taking a 10g subsample from six different 800 g test units. Homogeneity was evaluated by submitting 12 x 10 g pulp samples to a single laboratory for analysis. Paired samples were taken from each of the sampling units, allowing for an Analysis of Variance (ANOVA) to compare within-and between-unit variances across the six pairs. This statistical approach provides a relative measure of homogeneity and tests the null hypothesis that all sampling units originate from the same population distribution (see 'Homogeneity Evaluation' section below).

## STATISTICAL ANALYSIS

Certified Values and their uncertainty intervals (Table 1) have been determined for each analyte following removal of individual, laboratory dataset (batch) and 3SD outliers (single iteration).

Outlier evaluation was conducted in accordance with ISO 17034:2017 and ISO 33405:2024. While formal statistical tests were applied, professional statistical judgment was also exercised in determining the validity of potential outliers. Assessment of systematic bias and performance using independent control materials (CRMs) was incorporated to ensure compliance with the referenced standards and to establish metrological traceability of the certified values.

**95% Expanded Uncertainty** provides a 95 % probability that the true value of the analyte under consideration lies between the upper and lower limits and is calculated according to the method outlined in [5] and [15]. All known or suspected sources of bias have been investigated or taken into account.

**Indicative (uncertified) values** (Table 2) are present where the number of laboratories reporting a particular analyte is insufficient (< 5) to support certification or where interlaboratory consensus is poor. This data is intended for 'informational purposes' only.

**Standard Deviation** intervals (see Table 5, 'Performance Gates') provide an indication of a level of performance that might reasonably be expected from a laboratory being monitored by this CRM in a QA/QC program. They take into account errors attributable to measurement uncertainty and CRM variability. For an effective CRM the contribution of the latter should be negligible in comparison to measurement errors. The Standard Deviation values include all sources of measurement uncertainty: between-lab variance, within-run variance (precision errors) and CRM variability.

The SD for each analyte's certified value is calculated from the same filtered data set used to determine the certified value, i.e., after removal of all individual, lab dataset (batch) and 3SD outliers (single iteration). These outliers can only be removed after the absolute homogeneity of the CRM has been independently established, i.e., the outliers must be

COA-1971-OREAS 725b-R0 Page: 5 of 14

confidently deemed to be analytical rather than arising from inhomogeneity of the CRM. The standard deviation is then calculated for each analyte from the pooled accepted analyses generated from the certification program.

#### **Homogeneity Evaluation**

The tolerance limits (ISO 16269:2014) shown in Table 1 were determined using an analysis of precision errors method and are considered a conservative estimate of true homogeneity. The meaning of tolerance limits may be illustrated for C-(Graphite), Carbon, graphitic by Infrared Combustion, where 99 % of the time  $(1-\alpha=0.99)$  at least 95 % of subsamples  $(\rho=0.95)$  will have concentrations lying between 24.69 and 25.54 wt.%. Put more precisely, this means that if the same number of subsamples were taken and analysed in the same manner repeatedly, 99 % of the tolerance intervals so constructed would cover at least 95 % of the total population, and 1 % of the tolerance intervals would cover less than 95 % of the total population. *Please note that tolerance limits pertain to the homogeneity of the CRM only and should not be used as control limits for laboratory performance.* 

# Analysis of Variance (ANOVA) Study

In addition to the precision error method outlined above, homogeneity was also evaluated using an ANOVA study. This involved sending 12 x 10 g pulp samples to the SGS Australia Mineral Services, Perth, WA, Australia laboratory for analysis of Total Graphitic Carbon analysis by dilute acid (HCI) digestion followed by roasting at approx. 425 °C, then analysis by infrared combustion furnace finish (code GE\_CSA05V). The 12 samples consisted of paired samples from each of the six sampling units to enable an Analysis of Variance (ANOVA) by comparison of within- and between-unit variances across the six pairs. The ANOVA enables a relative measure of homogeneity and permits a test of the null hypothesis that all 'units' are drawn from the same population distribution. An ANOVA constructed in this way tests that no statistically significant difference exists in the variance between-units to that of the variance within-units. A *p*-value < 0.05 would indicate rejection of the null hypothesis at the 95 % confidence level (i.e., a significant difference likely does exist; meaning there is evidence of heterogeneity between the sample intervals).

All *p*-values were found to be statistically insignificant, and the Null Hypothesis is therefore retained. It is important to note that ANOVA provides a relative measure of homogeneity and that a CRM having poor absolute homogeneity can still pass these tests if the within-unit heterogeneity is large and similar across all units. Based on the statistical analysis of the results of the interlaboratory certification program, it can be concluded that OREAS 725b is fit-for-purpose as a certified reference material (see 'Intended Use' below).

#### PERFORMANCE GATES

Table 5 below shows intervals calculated for two and three standard deviations. As a guide these intervals may be regarded as warning or rejection for multiple 2SD outliers, or rejection for individual 3SD outliers in QC monitoring, although their precise application should be at the discretion of the QC manager concerned (also see 'Intended Use' section below). Westgard Rules extend the basics of single-rule QC monitoring using multi-rules (for more information visit www.westgard.com/mltirule.htm). A second method utilises a 5 % window calculated directly from the certified value.

Standard deviation is also shown in relative percent for one, two and three relative standard deviations (1RSD, 2RSD and 3RSD) to facilitate an appreciation of the magnitude of these numbers and a comparison with the 5 % window. Caution should be exercised when concentration levels approach lower limits of detection of the analytical methods employed as

performance gates calculated from standard deviations tend to be excessively wide whereas those determined by the 5 % method are too narrow. One approach used at commercial laboratories is to set the acceptance criteria at twice the detection level (DL)  $\pm$  10 %.

i.e., Certified Value ±10 % ±2DL [1].

Table 5. Performance Gates for OREAS 725b.

Constituent	Certified		Absolute Standard Deviations				Relative Standard Deviations			5 % window	
Constituent	Value	1SD	2SD Low	2SD High	3SD Low	3SD High	1RSD	2RSD	3RSD	Low	High
Infrared Combustion											
C-(Graphite), wt.%	25.12	0.555	24.01	26.23	23.45	26.78	2.21%	4.42%	6.63%	23.86	26.37

SI unit equivalents: wt.% (weight per cent) ≡ % (mass fraction).

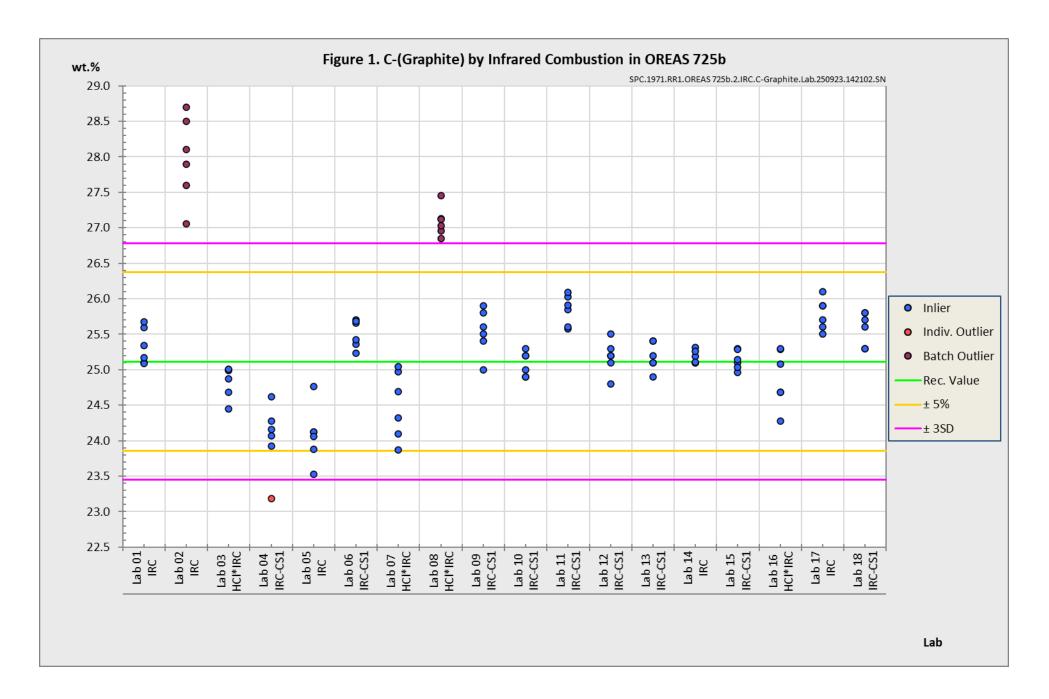
Note 1: intervals may appear asymmetric due to rounding.

Note 2: the number of decimal places quoted does not imply accuracy of the certified value to this level but are given to minimise rounding errors when calculating 2SD and 3SD windows.

## **PARTICIPATING LABORATORIES**

- 1. AFRILAB laboratory, Marrakesh, Marrakesh-Safi, Morocco
- 2. AGAT Laboratories, Calgary, Alberta, Canada
- 3. ALS, Brisbane, QLD, Australia
- 4. ALS, Johannesburg, South Africa
- 5. ALS, Loughrea, Galway, Ireland
- 6. ALS, Vancouver, BC, Canada
- 7. American Assay Laboratories, Sparks, Nevada, USA
- 8. ARGETEST Mineral Processing, Ankara, Central Anatolia, Turkey
- 9. Bureau Veritas Commodities Canada Ltd, Vancouver, BC, Canada
- 10. ESAN Istanbul, Istanbul, Turkey
- 11. MSALABS, Vancouver, BC, Canada
- 12. MSALABS Lindi Jumbo, Lindi, Ruangwa District, United Republic of Tanzania
- 13. PT Geoservices Ltd, Cikarang, Jakarta Raya, Indonesia
- 14. Saskatchewan Research Council, Saskatoon, Saskatchewan, Canada
- 15. SGS, Randfontein, Gauteng, South Africa
- 16. SGS Australia Mineral Services, Perth, WA, Australia
- 17. SGS Geosol Laboratorios Ltda, Vespasiano, Minas Gerais, Brazil
- 18. Shiva Analyticals Ltd, Bangalore North, Karnataka, India
- 19. UIS Analytical Services, Centurion, South Africa

Please note: To preserve anonymity, the above numbered alphabetical list of participating laboratories <u>does not</u> correspond with the Lab ID numbering on the scatter plots below.



COA-1971-OREAS 725b-R0 Page: 8 of 14

#### PREPARER AND SUPPLIER

Certified reference material OREAS 725b is prepared, certified and supplied by:

ORE Research & Exploration Pty Ltd Tel: +613-9729 0333 37A Hosie Street Web: www.oreas.com
Bayswater North VIC 3153 Email: info@ore.com.au

**AUSTRALIA** 

## **METROLOGICAL TRACEABILITY**

The interlaboratory results that underpin the certified values are metrologically traceable to the international measurement scale (SI) of mass (either as a % mass fraction or as milligrams per kilogram (mg/kg)) [14]. In line with popular use, all data within tables in this certificate are expressed as the mass fraction in either weight percent (wt.%) or parts per million (ppm).

The analytical samples sent to participating laboratories were selected in a manner to be representative of the entire prepared batch of CRM. This representativeness was maintained in each submitted laboratory sample batch and ensures the user that the data is traceable from sample selection through to the analytical results. The systematic sampling method was chosen due to the low risk of overlooking repetitive effects or trends in the batch due to the way the CRM was processed. In line with ISO 17025 [8], each analytical data set received from the participating laboratories has been validated by its assayer through the inclusion of internal reference materials and QC checks during and post analysis.

Participating laboratories were selected based on demonstrated analytical competence, including prior performance in interlaboratory comparison programs conducted by ORE Pty Ltd, with consideration given to their expertise in relevant analytical methods, measurands, and sample matrices. For the measurands reported in this certificate (Table 1), data were sourced from laboratories accredited to ISO/IEC 17025. Where formal accreditation was not held for specific operationally defined measurands, metrological traceability was verified through the use of well-characterised, independently certified reference materials (CRMs) included as control samples in the round robin study.

In accordance with ISO 33405:2024-05 [4], clause 9.2.5, and ISO 17034:2016 [8], clause 7.12.4 b), the use of such control samples provides an acceptable means of demonstrating traceability in the absence of formal accreditation. In this certification program, traceability was further supported by the agreement of measured values for control samples with their known certified values, thereby offering additional confidence in the calibration and validity of measurement results across participating laboratories.

#### **Operationally Defined Measurands**

In accordance with ISO 33405:2024-05, Clause 9.2.4, measurands (analytes) may be certified as operationally defined. For these measurands, traceability to the SI may not be achievable because the analytical procedure involves sample transformations (e.g., leaching or extraction). While instrument calibration can be traceable to appropriate units, the transformation steps themselves are not directly traceable and can only be evaluated through reference comparisons or harmonized procedures.

Accordingly, characterisation of these measurands has been based on the concordance of results obtained from multiple laboratories using a common, well-defined procedure. This approach ensures fitness-for-purpose and fulfils the requirements for metrological traceability as specified in ISO 17034 and ISO 33405 for operationally defined measurands.

#### COMMUTABILITY

The measurements of the results that underlie the certified values contained in this report were undertaken by methods involving pre-treatment (fusion/digestion) of the sample. This served to reduce the sample to a simple and well understood form permitting calibration using simple solutions of the CRM. Due to these methods being well understood and highly effective, commutability is not an issue for this CRM, All OREAS CRMs are sourced from natural ore minerals meaning they will display similar behaviour as routine 'field' samples in the relevant measurement process. Care should be taken to ensure 'matrix matching' as close as practically achievable. The matrix and mineralisation style of the CRM is described in the 'Source Material' section and users should select appropriate CRMs matching these attributes to the field samples being analysed.

#### **INTENDED USE**

OREAS 725b is intended to cover all activities needed to produce a measurement result. This includes extraction, possible separation steps and the actual measurement process (the signal producing step). OREAS 725b may be used to calibrate the entire procedure by producing a pure substance CRM transformed into a calibration solution.

OREAS 725b is intended for the following uses:

- For the monitoring of laboratory performance in the analysis of analytes reported in Table 1 in geological samples;
- For the verification/ validation of analytical methods for analytes reported in Table 1;
- For the calibration of instruments used in the determination of the concentration of analytes reported in Table 1. When a value provided in this certificate is used to calibrate a measurement process, the uncertainty associated with that value should be appropriately propagated into the user's uncertainty calculation. Users can determine an approximation of the standard uncertainty by calculating one fourth of the width of the Expanded Uncertainty interval given in this certificate (Expanded Uncertainty intervals are provided in Table 1).

#### MINIMUM SAMPLE SIZE

To relate analytical determinations to the values in this certificate, the minimum mass of sample used should match the typical mass that the laboratories used in the interlaboratory (round robin) certification program. This means that different minimum sample masses should be used depending on the operationally defined methodology as follows:

Total Graphitic Carbon (TGC) by hydrochloric acid digestion to remove carbonates followed by roasting to remove organic carbon, the residue is then determined by infrared combustion furnace: ≥ 0.05 g.

COA-1971-OREAS 725b-R0 Page: 10 of 14



#### PERIOD OF VALIDITY & STORAGE INSTRUCTIONS

The certification of OREAS 725b remains valid, within the specified measurement uncertainties, until at least October 2039, provided the CRM is handled and stored in accordance with the instructions given below. This certification is nullified if the CRM is any way changed or contaminated.

Store in a clean and cool dry place away from direct sunlight.

Long-term stability will be monitored at appropriate intervals and purchasers notified if any changes are observed. The period of validity may well be indefinite and will be reassessed prior to expiry with the aim of extending the validity if possible.

## Single-use 10g sachets

OREAS 725b is packaged in single-use laminated foil sachets. Following analysis, it is the manufacturer's expectation that any remaining material is discarded. It is the user's responsibility to prevent contamination and avoid prolonged exposure of the sample to the atmosphere prior to analysis.

## Repeat-use packaging (e.g., 500 g plastic jars)

After taking a subsample, users should replace the lid of the jar promptly and securely to prevent accidental spills and airborne contamination. OREAS 725b contains a preequilibrated hygroscopic\* matrix with an indicative value for moisture provided to enable users to check for changes to stored material by determining moisture in the user's laboratory and comparing the result to the value in Table 3 in this certificate.

\*A pre-equilibrated hygroscopic matrix means exposure to atmospheres significantly different, in terms of temperature and humidity, from the climate during manufacturing should have negligible impact on the precision of results. Hygroscopic moisture is the amount of adsorped moisture (weakly held H<sub>2</sub>O- molecules on the surface of exposed material) following exposure to the local atmosphere. Usually, equilibration of material to the local atmosphere will occur if the material is spread into a thin (~2mm thick) layer and left exposed for a period of 2 hours.

#### **INSTRUCTIONS FOR HANDLING & CORRECT USE**

Fine powders pose a risk to eyes and lungs and therefore standard precautions including the use of safety glasses and dust masks are advised.

Pre-homogenisation of the CRM prior to subsampling and analysis is not necessary as there is no particle segregation under transport [12].

As per routine analysis at commercial laboratories, the certified values derived by borate fusion with XRF finish are on a dry sample basis.

Analytes by all other methods refer to the concentration levels in the packaged state. There is no need for drying prior to weighing and analysis for these methods.

#### **Authoritative Source of Information**

This Certificate of Analysis constitutes the primary and authoritative document for the certified values, associated expanded uncertainties, and their correct use. While the accompanying DataPack provides supporting information, including raw data and



uncertainty estimates with additional significant figures, these extended figures are provided solely for transparency, convenience and statistical reference. Users must rely exclusively on the values stated in this Certificate, rounded to an appropriate number of significant figures, for all metrological and analytical purposes. Any discrepancy between values presented in the DataPack and those in this Certificate shall be resolved in favour of the information provided herein.

# QC monitoring using multiples of the Standard Deviation (SD)

In the application of SD's in monitoring performance it is important to note that not all laboratories function at the same level of proficiency and that different methods in use at a particular laboratory have differing levels of precision. Each laboratory has its own inherent SD (for a specific concentration level and analyte-method pair) based on the analytical process and this SD is not directly related to the round robin program.

The majority of data generated in the round robin program was produced by a selection of world class laboratories. The SD's thus generated are more constrained than those that would be produced across a randomly selected group of laboratories. To produce more generally achievable SD's the 'pooled' SD's provided in this report include interlaboratory bias. This 'one size fits all' approach may require revision at the discretion of the QC manager concerned following careful scrutiny of QC control charts.

The performance gates shown in Table 5 are intended only to be used as a preliminary guide as to what a laboratory may be able to achieve. Over a period of time monitoring your own laboratory's data for this CRM, SD's should be calculated directly from your own laboratory's process. This will enable you to establish more specific performance gates that are fit for purpose for your application as well as the ability to monitor bias. If your long-term trend analysis shows an average value that is within the 95 % expanded uncertainty then generally there is no cause for concern in regard to bias.

#### **LEGAL NOTICE**

Ore Research & Exploration Pty Ltd has prepared and statistically evaluated the property values of this reference material to the best of its ability. The Purchaser by receipt hereof releases and indemnifies Ore Research & Exploration Pty Ltd from and against all liability and costs arising from the use of this material and information.

> © COPYRIGHT Ore Research & Exploration Pty Ltd. Unauthorised copying, reproduction, storage or dissemination is prohibited.

## **DOCUMENT HISTORY**

Revision No.	Date	Changes applied
0	23 <sup>rd</sup> September, 2025	First publication.

# **CERTIFYING OFFICER**

Craig Hamlyn (B.Sc. Hons - Geology), Technical Manager - ORE P/L

COA-1971-OREAS 725b-R0 Page: 12 of 14



#### **QMS CERTIFICATION**

ORE Pty Ltd is accredited for compliance with ISO 17034:2016 (Accreditation number 20483).





ORE Pty Ltd is ISO 9001:2015 certified by Lloyd's Register Quality Assurance Ltd for its quality management system including development, manufacturing, certification and supply of CRMs.





#### REFERENCES

- [1] Govett, G.J.S. (1983). Handbook of Exploration Geochemistry, Volume 2: Statistics and Data Analysis in Geochemical Prospecting (Variations of accuracy and precision).
- [2] ISO Guide 30:2015. Terms and definitions used in connection with reference materials.
- [3] ISO 33401:2024-01. Reference materials Contents of certificates, labels and accompanying documentation.
- [4] ISO 33405:2024-05. Reference materials Approaches for characterization and assessment of homogeneity and stability.
- [5] ISO Guide 98-3:2008. Guide to the expression of uncertainty in measurement (GUM:1995).
- [6] ISO 16269:2014. Statistical interpretation of data Part 6: Determination of statistical tolerance intervals.
- [7] ISO/TR 16476:2016, Reference Materials Establishing and expressing metrological traceability of quantity values assigned to reference materials.
- [8] ISO 17025:2017, General requirements for the competence of testing and calibration laboratories.
- [9] ISO 17034:2016. General requirements for the competence of reference material producers.
- [10] Munsell Rock Color Book (2014). Rock-Color Chart Committee, Geological Society of America (GSA), Minnesota (USA).
- [11] OREAS-BUP-70-09-11: Statistical Analysis OREAS Evaluation Method.
- [12] OREAS-TN-04-1498: Stability under transport; an experimental study of OREAS CRMs.
- [13] OREAS-TN-05-1674: Long-term storage stability; an experimental study of OREAS CRMs.
- [14] Thompson, A.; Taylor, B.N. (2008); Guide for the Use of the International System of Units (SI); NIST Special Publication 811; U.S. Government Printing Office:

- Washington, DC; available at: https://physics.nist.gov/cuu/pdf/sp811.pdf (accessed Nov 2021).
- [15] Van der Veen A.M.H. et al. (2001). Uncertainty calculations in the certification of reference materials, Accred Qual Assur 6: 290-294.

