	Unit ID: 1498
Domain	**METALLURGICAL PROCESSING - CORE**
Title:	**Process and interpret data in the context of metallurgical processing**
Level: 4	**Credits: 8**

Purpose

This unit standard is intended for those who carry out metallurgical processing operations in a leadership context. People holding credit for this unit standard are able to: Retrieve and check data; calculate scientific quantities; present data in tables, charts and graphs; interpret data in tables, charts and graphs; and keep accurate records and maintain confidentiality.

Special Notes

1. Assessment evidence may be collected from a real workplace or a simulated workplace in which processing operations are carried out.

2. Regulations and legislation, including subsequent amendments, relevant to this unit standard may include but are not limited to the following:
   - Labour Act, No. 11, 2007
   - Mineral Act, No. 33, 1992
   - Mine Health and Safety Regulations, 1999
   - Regulations relating to the Health and Safety of employees at work, 1997

   and all industry specific regulations, legislations, code of practice, or code of conduct.

Quality Assurance Requirements

This unit standard and others within this subfield may be awarded by institutions which meet the accreditation requirements set by the Namibia Qualifications Authority and the Namibia Training Authority and which comply with the national assessment and moderation requirements. Details of specific accreditation requirements and the national assessment arrangements are available from the Namibia Qualifications Authority and the Namibia Training Authority. All approved unit standards, qualifications and national assessment arrangements are available on the Namibia Training Authority website www.nta.com.na.

Elements and Performance Criteria

Element 1: Retrieve and check data

Performance Criteria

1.1 Data is stored and retrieved using appropriate files and/or application software.

1.2 The quality of data is verified using workplace procedures.

1.3 Errors in data are rectified according to workplace procedures.

Element 2: Calculate scientific quantities

Performance Criteria

2.1 Statistical values for given data are claculated.

2.2 Scientific quantities are calculated using given formulae and data and estimate uncertainties.

2.3 Consistency of calculated quantities with estimations and expectations are verified.

2.4 Calculated quantities are reported using the appropriate units and correct number of significant figures.

Element 3: Present data in tables, charts and graphs

Performance Criteria

3.1 Data are presented in clearly labelled tables and charts.

3.2 Data are presented in graphs using appropriate scales to span the range of data or display trends.

3.3 All data are reported using the appropriate units and correct number of significant figures.

Element 4: Interpret data in tables, charts and graphs

Performance Criteria

4.1 Significant features of graphs, such as gradients, intercepts, maximum and minimum values, and limit lines, are interpreted.

4.2 Trends in data are recognised and reported.

Element 5: Keep accurate records and maintain confidentiality

Performance Criteria

5.1 Information are transcribed accurately.

5.2 The accuracy of records are verified according to workplace procedures.

5.3 Workplace records are filed and stored according to workplace procedures.

5.4 Reference documents are filed logically, kept up-to-date, and secured according to workplace procedures.

5.5 Workplace confidentiality standards are observed.

Registration Data

Subfield:	Metallurgy
Date first registered:	28 September 2016
Date this version registered:	28 September 2016
Anticipated review:	2021
Body responsible for review:	Namibia Training Authority