



Government Gazette Staatskoerant

REPUBLIC OF SOUTH AFRICA
REPUBLIEK VAN SUID-AFRIKA

Vol. 469

Pretoria, 9 July
Julie 2004

No. 26541



AIDS HELPLINE: 0800-0123-22 Prevention is the cure

CONTENTS • INHOUD

| <i>No.</i> | | <i>Page No.</i> | <i>Gazette No.</i> |
|---|---|---------------------|------------------------|
| GOVERNMENT NOTICES | | | |
| South African Qualifications Authority | | | |
| <i>Government Notices</i> | | | |
| 808 | National Standards Bodies Regulations: Standards Generating Body (SGB) for South African Sign Language registered by NSB 04, Communication Studies and Language | 3 | 26541 |
| 809 | do.: Standards Generating Body (SGB) for GET/FET Communication Studies and Language | 17 | 26541 |
| 810 | Standards Generating Bodies: National Standards Body 08, Law, Military Science and Security | 22 | 26541 |
| 811 | National Standards Bodies Regulations: Standards Generating Body (SGB) for Mining and Minerals registered by NSB 06, Manufacturing, Engineering and Technology | 28 | 26541 |

GOVERNMENT NOTICES

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

No. 808

9 June 2004



SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)

In accordance with regulation 24(c) of the National Standards Bodies Regulations of 28 March 1998, the Standards Generating Body (SGB) for

South African Sign Language

Registered by NSB 04, Communication Studies and Language, publishes the following unit standards for public comment.

This notice contains the titles, fields, sub-fields, NQF levels, credits, and purpose of the unit standards. The unit standards can be accessed via the SAQA web-site at www.saqo.org.za. Copies may also be obtained from the Directorate of Standards Setting and Development at the SAQA offices, Hatfield Forum West, 1067 Arcadia Street, Hatfield, Pretoria.

Comment on the unit standards should reach SAQA at the address *below and no later than 9 August 2004*. All correspondence should be marked **Standards Setting – SGB for South African Sign Language** and addressed to

The Director: Standards Setting and Development
SAQA

Attention: Mr. D Mphuting

Postnet Suite 248

Private Bag X06

Waterkloof

0145

or faxed to 012 – 431-5144

e-mail: mmphuting@saqa.co.za

JOE SAMUELS

DIRECTOR: STANDARDS SETTING AND DEVELOPMENT



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

1

Deliver a variety of prepared presentations and answer questions related to an unfamiliar event or topic using South African Sign Language

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115799 | Deliver a variety of prepared presentations and answer questions related to an unfamiliar event or topic using South African Sign Language | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB SA Sign Language and Sign Lang Interpreting | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Communication Studies and Language | Language | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| COM-LAN-0-SGB SASLI | Regular | Level 5 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare presentations using SASL for a known audience on unfamiliar topics.

SPECIFIC OUTCOME 2

Deliver presentations to a known audience on unfamiliar topics, using SASL.

SPECIFIC OUTCOME 3

Answer questions on presentations, using SASL.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

2

Discuss a practical problem and offer a solution, using South African Sign Language

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115804 | Discuss a practical problem and offer a solution, using South African Sign Language | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB SA Sign Language and Sign Lang Interpreting | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Communication Studies and Language | Language | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| COM-LAN-0-SGB SASLI | Regular | Level 5 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Participate in a discussion about a practical problem, using SASL.

SPECIFIC OUTCOME 2

Offer a solution to a practical problem, using SASL.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

3

Explain complex processes to Deaf individuals and groups of Deaf people, using South African Sign Language

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115803 | Explain complex processes to Deaf individuals and groups of Deaf people, using South African Sign Language | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB SA Sign Language and Sign Lang Interpreting | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Communication Studies and Language | Language | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| COM-LAN-0-SGB SASLI | Regular | Level 5 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare to explain a complex process, using SASL.

SPECIFIC OUTCOME 2

Explain, and respond to questions on, a complex process, using SASL.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

4

Hold conversations with Deaf individuals and groups of Deaf people on an unfamiliar topic using South African Sign Language

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115813 | Hold conversations with Deaf individuals and groups of Deaf people on an unfamiliar topic using South African Sign Language | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB SA Sign Language and Sign Lang Interpreting | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Communication Studies and Language | Language | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| COM-LAN-0-SGB SASLI | Regular | Level 5 | 6 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Hold a conversation with one Deaf person on an unfamiliar topic, using SASL.

SPECIFIC OUTCOME 2

Hold a conversation with a group of Deaf signers, using SASL.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

5

Make complex arrangements with deaf individuals and groups of deaf people, using South African Sign Language

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115798 | Make complex arrangements with deaf individuals and groups of deaf people, using South African Sign Language | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB SA Sign Language and Sign Lang Interpreting | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Communication Studies and Language | Language | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| COM-LAN-0-SGB SASLI | Regular | Level 5 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Facilitate a discussion to make complex arrangements using SASL.

SPECIFIC OUTCOME 2

Finalise details for complex arrangements with a group of people, using SASL.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

6

Paraphrase and summarise a signed presentation on an unfamiliar topic using South African Sign Language

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115800 | Paraphrase and summarise a signed presentation on an unfamiliar topic using South African Sign Language | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB SA Sign Language and Sign Lang Interpreting | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Communication Studies and Language | Language | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| COM-LAN-0-SGB SASLI | Regular | Level 5 | 5 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Ask questions on a signed monologue and a signed text on an unfamiliar topic.

SPECIFIC OUTCOME 2

Paraphrase a signed monologue on an unfamiliar topic, using SASL.

SPECIFIC OUTCOME 3

Summarise the main points of a short signed text on an unfamiliar topic, using SASL.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

9

Debate an issue using South African Sign Language

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115812 | Debate an issue using South African Sign Language | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB SA Sign Language and Sign Lang Interpreting | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Communication Studies and Language | Language | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| COM-LAN-0-SGB SASLI | Regular | Level 6 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare for a debate.

SPECIFIC OUTCOME 2

Participate in a debate, using SASL.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

6

Paraphrase and summarise a signed presentation on an unfamiliar topic using South African Sign Language

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115800 | Paraphrase and summarise a signed presentation on an unfamiliar topic using South African Sign Language | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB SA Sign Language and Sign Lang Interpreting | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Communication Studies and Language | Language | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| COM-LAN-0-SGB SASLI | Regular | Level 5 | 5 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Ask questions on a signed monologue and a signed text on an unfamiliar topic.

SPECIFIC OUTCOME 2

Paraphrase a signed monologue on an unfamiliar topic, using SASL.

SPECIFIC OUTCOME 3

Summarise the main points of a short signed text on an unfamiliar topic, using SASL.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

7

Paraphrase and summarise signed monologues on familiar topics using South African Sign Language

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------|---------------|
| 115814 | Paraphrase and summarise signed monologues on familiar topics using South African Sign Language | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB SA Sign Language and Sign Lang Interpreting | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Communication Studies and Language | | Language | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| COM-LAN-0-SGB SASLI | Regular | Level 5 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Ask questions about a signed monologue and signed text in preparation for paraphrasing.

SPECIFIC OUTCOME 2

Paraphrase a signed monologue on a familiar topic, using SASL.

SPECIFIC OUTCOME 3

Summarise the main points of a short signed text, using SASL.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

8

Recount a signed conversation on a simple topic, using South African Sign Language

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115808 | Recount a signed conversation on a simple topic, using South African Sign Language | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB SA Sign Language and Sign Lang Interpreting | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Communication Studies and Language | Language | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| COM-LAN-0-SGB SASLI | Regular | Level 5 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Recount the main points of short, signed conversations, using SASL.

SPECIFIC OUTCOME 2

Recount the specific details of a short signed conversation between two or three people, using SASL.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

9

Debate an issue using South African Sign Language

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115812 | Debate an issue using South African Sign Language | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB SA Sign Language and Sign Lang Interpreting | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Communication Studies and Language | Language | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| COM-LAN-0-SGB SASLI | Regular | Level 6 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare for a debate.

SPECIFIC OUTCOME 2

Participate in a debate, using SASL.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

10

Demonstrate knowledge of the structure of South African Sign Language

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115802 | Demonstrate knowledge of the structure of South African Sign Language | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB SA Sign Language and Sign Lang Interpreting | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Communication Studies and Language | Language | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| COM-LAN-0-SGB SASLI | Regular | Level 6 | 6 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Describe SASL phonological processes.

SPECIFIC OUTCOME 2

Describe SASL morphological processes.

SPECIFIC OUTCOME 3

Identify SASL syntactical processes.

SPECIFIC OUTCOME 4

Identify SASL semantics.

SPECIFIC OUTCOME 5

Identify language variations within SASL.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

11

Interview a Deaf person using South African Sign Language

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115810 | Interview a Deaf person using South African Sign Language | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB SA Sign Language and Sign Lang Interpreting | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Communication Studies and Language | Language | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| COM-LAN-0-SGB SASLI | Regular | Level 6 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare to interview a Deaf person, using SASL.

SPECIFIC OUTCOME 2

Interview a person on a pre-arranged topic using SASL.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

12

Recount a signed conversation on a complex topic, using South African Sign Language

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------|---------------|
| 115807 | Recount a signed conversation on a complex topic, using South African Sign Language | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB SA Sign Language and Sign Lang Interpreting | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Communication Studies and Language | | Language | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| COM-LAN-0-SGB SASLI | Regular | Level 6 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Recount the main points of complex signed conversations, using SASL.

SPECIFIC OUTCOME 2

Recount the specific details of complex signed conversation between two or three people using SASL.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

13

Research a selected issue of the deaf community and deaf culture, using South African Sign Language

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115806 | Research a selected issue of the deaf community and deaf culture, using South African Sign Language | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB SA Sign Language and Sign Lang Interpreting | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Communication Studies and Language | Language | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| COM-LAN-0-SGB SASLI | Regular | Level 6 | 10 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Analyse Deaf culture in South Africa.

SPECIFIC OUTCOME 2

Analyse the impact of an issue affecting the Deaf community and/or Deaf culture.

SPECIFIC OUTCOME 3

Carry out research into Deaf culture and the Deaf community.

SPECIFIC OUTCOME 4

Carry out research on the background to an issue affecting the Deaf community and/or Deaf culture.

SPECIFIC OUTCOME 5

Present research findings using SASL.

No. 809

9 June 2004

**SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)**

In accordance with regulation 24(c) of the National Standards Bodies Regulations of 28 March 1998, the Standards Generating Body (SGB) for

GET/FET Communication Studies and Language

Registered by NSB 04, Communication Studies and Language, publishes the following unit standards for public comment.

This notice contains the titles, fields, sub-fields, NQF levels, credits, and purpose of the unit standards. The unit standards can be accessed via the SAQA web-site at www.saqa.org.za. Copies may also be obtained from the Directorate of Standards Setting and Development at the SAQA offices, Hatfield Forum West, 1067 Arcadia Street, Hatfield, Pretoria.

Comment on the unit standards should reach SAQA at the address ***below and no later than 9 August 2004***. All correspondence should be marked **Standards Setting – SGB for GET/FET Communication Studies** and addressed to

The Director: Standards Setting and Development
SAQA

Attention: Mr. D Mphuthing

Postnet Suite 248

Private Bag X06

Waterkloof

0145

or faxed to 012 – 431-5144

e-mail: mmphuthing@saqa.co.za

JOE SAMUELS

DIRECTOR: STANDARDS SETTING AND DEVELOPMENT



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

1

Access, process, adapt and use data from a wide range of texts

| SAQA US ID | UNIT STANDARD TITLE | | |
|------------------------------------|--|---------------|---------|
| 115792 | Access, process, adapt and use data from a wide range of texts | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Communication Studies | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Communication Studies and Language | Language | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| COM-LAN-0-SGB COSTL | Regular | Level 5 | 5 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Analyse and respond to texts produced for a range of purposes, audiences, contexts in the workplace.

SPECIFIC OUTCOME 2

Identify and critically explore textual features and language usage in texts.

SPECIFIC OUTCOME 3

Access, process and index data from various texts.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

2

Sustain oral interaction across a wide range of contexts and critically evaluate spoken texts

| SAQA US ID | UNIT STANDARD TITLE | | |
|------------------------------------|---|---------------|---------|
| 115789 | Sustain oral interaction across a wide range of contexts and critically evaluate spoken texts | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Communication Studies | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Communication Studies and Language | Language | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| COM-CMS-0-SGB COSTL | Regular | Level 5 | 5 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Interact critically and purposefully as a listener and/or speaker in oral communication.

SPECIFIC OUTCOME 2

Analyse and critically evaluate oral presentations.

SPECIFIC OUTCOME 3

Use and evaluate strategies for listening and speaking in sustained oral interactions.

SPECIFIC OUTCOME 4

Analyse and evaluate responses to spoken texts critically and adjust own as required.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

3

Use language and communication strategies for vocational and occupational learning

| SAQA US ID | UNIT STANDARD TITLE | | |
|------------------------------------|--|----------------------|---------|
| 115791 | Use language and communication strategies for vocational and occupational learning | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Communication Studies | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Communication Studies and Language | | Language | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| COM-LAN-0-SGB COSTL | Regular | Level 5 | 5 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Formulate and use learning strategies.

SPECIFIC OUTCOME 2

Use and apply occupational and vocational learning materials and resources.

SPECIFIC OUTCOME 3

Conduct research and submit recommendations.

SPECIFIC OUTCOME 4

Lead and function effectively in a team and as an individual.

SPECIFIC OUTCOME 5

Identify characteristics of workplace, evaluate specific needs of occupational / vocational context.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

4

Write and present for a wide range of purposes, audiences and contexts

| SAQA US ID | UNIT STANDARD TITLE | | |
|------------------------------------|--|---------------|---------|
| 115790 | Write and present for a wide range of purposes, audiences and contexts | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Communication Studies | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Communication Studies and Language | Language | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| COM-LAN-0-SGB COSTL | Regular | Level 5 | 5 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Use writing skills for specific purposes, audiences and contexts.

SPECIFIC OUTCOME 2

Access, process, re-organise, and synthesise information in order to present it.

SPECIFIC OUTCOME 3

Use appropriate language conventions, textual features and style for specific workplace purposes.

SPECIFIC OUTCOME 4

Draft and edit texts.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)

In order to proceed with the recognition of Standards Generating Bodies in terms of Government Regulations 19(1)(c) and 22(2) of 28 March 1998, National Standards Body 08, Law, Military Science and Security, invites public comment with respect to *the acceptability of the nominees and the representativeness of the key education and training stakeholder interest groups* listed as SGB applicants below.

In addition, the NSB invite submissions from interested parties wishing to serve on such an SGB. Interested parties should take note of the section on SGB Information below.

All nominations/ applications should be accompanied by curricula vitae.

More information regarding this application may be obtained on the SAQA website or from the SAQA offices.

Comment should reach the NSB at the address below by not later than **9 August 2004**
All correspondence should be marked **SGB for Landward Defence**

The Director: Standards Setting and
Development
SAQA
Attention: Mr. D Mphuthing
Postnet Suite 248
Private Bag X06
Waterkloof
0145
or faxed to 012 – 431-5144
e-mail: dmphuthing@saqa.co.za

SGB INFORMATION

As a necessary step in the development and implementation of the National Qualifications Framework, The National Standards Bodies are briefed [regulation 19(1)(c) of 28 March 1998] to recognise or establish Standards Generating Bodies (SGBs).

SGBs shall:

- a. generate standards and qualifications in accordance with the Authority requirements in identified sub-fields and levels;
- b. update and review standards;
- c. recommend standards and qualifications to National Standards Bodies;
- d. recommend criteria for the registration of assessors and moderators or moderating bodies; and
- e. perform such other functions as may from time-to-time be delegated by their National Standards Body.

Any bodies wishing to nominate representatives, make application to serve on, or make any other submission with regard to the above SGB should note the following information.

SGBs should be composed of organisations, which shall be key education and training stakeholder interest groups and experts in the sub-field. The NSB, when making its final decisions will have due regard for, among other things, *the need for representativeness and equity, redress and relevant expertise in terms of the work of the SGBs.*

Organisations proposing to nominate persons to SGBs should be sensitive to the need for **equity** and **redress**, and shall nominate persons who-

- (a) will be able to consider issues of productivity, fairness, public interest and international comparability as related to education and training in the sub-field;
- (b) enjoy credibility in the sub-field in question, who enjoy respect; have the necessary expertise and experience in the sub-field and have the support or backing of the nominating body;
- (c) are able to advocate and mediate the needs and interests of all levels within the sub-field covered by the Standards Generating Body;
- (d) are able to exercise critical judgement at a high level; and
- (e) are committed to a communication process between the Standards Generating Body, the National Standards Body and the Constituency.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

BRIEF OF THE SGB

The National Standards Body (NSB) 08 hereby gives notice of the registration of the SGB for Landward Defence in the sub-field of the Sovereignty of the State from NQF levels 1 to 6, in order to:

1. Identify transformation, development, access and equity issues relevant to Landward Defence Capabilities and develop mechanisms to include these issues within the standards and qualifications as envisaged in (3) below [*Regulation 24(1)(e)*].
2. Develop learning and career pathways for potential standards and qualifications in to Landward Defence Capabilities from NQF level 1 through to level 6 [*Regulation 24(1)(e)*].
3. Generate the following qualifications and unit standards in accordance with SAQA requirements [*Regulation 24(1)(a)*].
 - National Certificate in the Planning and Command and Control of Artillery Operations (NQF Level 5)
 - National Certificate in the Conduct of Artillery Operations (NQF Level 5)
 - National Certificate in the Planning and Command and Control of Infantry Operations (NQF Level 5)
 - National Certificate in the Conduct of Infantry Operations (NQF Level 5)
 - National Certificate in the Planning and Command and Control of Armour Operations (NQF Level 5)
 - National Certificate in the Conduct of Armour Operations (NQF Level 5)
 - National Certificate in the Planning and Command and Control of Tactical Intelligence Operations (NQF Level 5)
 - National Certificate in the Conduct of Tactical Intelligence Operations (NQF Level 5)
 - National Certificate in the Planning and Command and Control of Military Engineer Operations (NQF Level 5)
 - National Certificate in the Conduct of Military Engineer Operations (NQF Level 5)
 - National Certificate in the Planning and Command and Control of Air Defence Artillery Operations (NQF Level 5)
 - National Certificate in the Conduct of Air Defence Artillery Operations (NQF Level 5)
4. Recommend the qualifications and standards generated in paragraph 3, above, to the NSB [*Regulation 24 (1)(c)*].
5. Recommend criteria for the registration of assessors and moderators or moderating bodies [*Regulation 24(1)(d)*].
6. Review these qualifications and unit standards and effect the necessary changes [*Regulation 24(1)(b)*].
7. Perform such other functions as may from time to time be delegated by NSB 08 (Law, Military Science and Security) [*Regulation 24(1)(e)*].

7. Perform such other functions as may from time to time be delegated by NSB 08 (Law, Military Science and Security) [Regulation 24(1)(e)].

COMPOSITION OF THE SGB

| Name of Nominee | Workplace | Nominating Body | Qualifications/Experience |
|---------------------|-----------------------|--|---|
| Laubscher, C.C. | Department of Defence | SA Army Office, Chief Directorate Army Force Preparation | BSC degree University of Stellenbosch Senior Management Program SA Army Senior Command and Staff Duties Course 15 years of experience in formal training (ETD) and ETD management Currently appointed as SA Army Senior Staff Officer ETD |
| Vd Westhuizen, J.H. | Department of Defence | SA Army Office, Chief Directorate Army Force Preparation | BA degree (HOD) SA Army Senior Command and Staff Duties Course 10 years of experience in formal training (ETD) and ETD management Currently appointed as SA Army Staff Officer Grade 1 Formal ETD |
| Masango, N.G. | Department of Defence | SA Army Office, Chief Directorate Army Force Preparation | St 10 Infantry Unit Commanders Course 2 years of experience in formal training (ETD) and ETD management Currently appointed as Staff Officer Grade 2 Formal ETD |
| Ramantswana, F.M. | Department of Defence | SA Army Infantry Formation | St 10 SANDF Joint Senior Command and Staff Program Currently appointed as Senior Staff Officer Force Preparation |
| Roux, N.J. | Department of Defence | SA Army Infantry Formation | St 10 SA Army Junior Command and Staff Duties Course 10 Years experience in training and ETD management within the SA Army Currently appointed as Staff Officer Grade 1 ETD |
| Els, F.A. | Department of Defence | SA Army Artillery Formation | SA Army Junior Command and Staff Duties Course 13 years of experience in training Currently appointed as Staff Officer Grade 1 ETD |
| Khasapane, L.V. | Department of Defence | SA Army Artillery Formation | St 10 SA Army Junior Command and Staff Duties Course |

| | | | |
|---------------|-----------------------|--------------------------------|---|
| Truter, S. | Department of Defence | SA Army Engineer Formation | B Mil degree Higher Education Diploma Engineer Squadron Commanders Course 2 Years experience in formal training (ETD) and ETD management Currently appointed as Staff Officer Grade 2 Terrain Intelligence Training |
| Modise, K.P. | Department of Defence | SA Army Intelligence Formation | St 10 SA Army Senior Command and Staff Duties Course 15 Years of experience in Tactical Intelligence Currently appointed as Senior Staff Officer Force Preparation |
| Thekiso, M. | Department of Defence | SA Army Intelligence Formation | St 10 SA Army Junior Command and Staff Duties Course 5 Years experience in Intelligence ETD Currently appointed as Staff Officer Grade 2 ETD |
| Mercuur, R. | Department of Defence | SA Army Intelligence Formation | St10 SA Army Integrated Sub-Unit Commanders Course 7 Years experience in Intelligence ETD Currently appointed as Staff Officer Grade 1 Combat Readiness |
| Sibango, A.M. | Department of Defence | SA Army Training Formation | St 10 Executive National Security Program 15 Years of experience in control of training in the Transkei Defence Force Currently appointed as Senior Staff Officer Force Preparation |
| Neil, M.C. | Department of Defence | SA Army Training Formation | St 10 SA Army Junior Command and Staff Duties Course 9 Years of experience in management of junior training within the SA Army Currently appointed as Staff Officer Grade 1 ETD |
| Rambuda, M.A. | Department of Defence | SA Army Training Formation | St 10 SA Army Integrated Sub-Unit Commanders Course 3 Years experience in ETD Currently appointed as Staff Officer Grade 1 Force Preparation |

| | | | |
|-----------------|-----------------------|---|---|
| | | | 5 years of experience in artillery training Currently appointed as artillery battery commander |
| Pieters, G. | Department of Defence | SA Army Air Defence Artillery Formation | St 10 SA Army Junior Command and Staff Duties Course Training of Trainers (IIR) 5 years of experience in formal training (ETD) and ETD management Currently appointed as Staff Officer Grade 1 ETD |
| Vele, N.A. | Department of Defence | SA Army Air Defence Artillery Formation | St 10 SA Army Integrated Sub-Unit Commanders Course Training of Trainers (IIR) 2 years of experience in formal training (ETD) and ETD management Currently appointed as Staff Officer Grade 2 ETD |
| Mathebula, E.J. | Department of Defence | SA Army Armour Formation | St 10 SA Army Junior Command and Staff Duties Course 10 Years experience in formal training (ETD) and ETD management Currently appointed as Staff Officer Grade 1 ETD |
| Boshoff, A.D. | Department of Defence | SA Army Armour Formation | B Mil degree Honors in Public Administration SA Army Integrated Sub-Unit Commanders Course 5 Years experience in formal training (ETD) and ETD management Currently appointed as acting Staff Officer Grade 2 ETD |
| Mahlangu, K.E. | Department of Defence | SA Army Engineer Formation | St 10 SA Army Junior Command and Staff Duties Course 5 Years experience in formal training (ETD) and ETD management Currently appointed as Staff Officer Grade 1 ETD |
| Edwards, M.N. | Department of Defence | SA Army Engineer Formation | B Mil degree SA Army Integrated Sub-Unit Commanders Course 5 Years experience in formal training (ETD) and ETD management Currently appointed as Staff Officer Grade 2 ETD |



Established in terms of Act 58 of 1995

SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)

In accordance with regulation 24(c) of the National Standards Bodies Regulations of 28 March 1998, the Standards Generating Body (SGB) for

Mining and Minerals

Registered by NSB 06, Manufacturing, Engineering and Technology, publishes the following unit standards for public comment.

This notice contains the titles, fields, sub-fields, NQF levels, credits, and purpose of the unit standard. The unit standard can be accessed via the SAQA web-site at www.saqa.org.za. Copies may also be obtained from the Directorate of Standards Setting and Development at the SAQA offices, Hatfield Forum West, 1067 Arcadia Street, Hatfield, Pretoria.

Comment on the unit standards should reach SAQA at the address *below and no later than 9 August 2004*. All correspondence should be marked **Standards Setting – SGB for Mining and Minerals** and addressed to

The Director: Standards Setting and Development
SAQA

Attention: Mr. D Mphuthing

Postnet Suite 248

Private Bag X06

Waterkloof

0145

or faxed to 012 – 431-5144

e-mail: dmphuthing@saqa.co.za

JOE SAMUELS

DIRECTOR: STANDARDS SETTING AND DEVELOPMENT



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

1

Compact material using self propelled compactor with operator off board

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115657 | Compact material using self propelled compactor with operator off board | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 1 | 1 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Prepare to compact an area.

SPECIFIC OUTCOME 2

Compact an area.

SPECIFIC OUTCOME 3

Monitor compacting operations.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

2

Conduct business presentations

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--------------------------------|----------------------------|---------|
| 115645 | Conduct business presentations | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 1 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare presentation.

SPECIFIC OUTCOME 2

Produce presentation.

SPECIFIC OUTCOME 3

Conduct a presentation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

3

Demonstrate knowledge and understanding of the relevant terminology used in mining - range of underground coal, surface, underground hard rock

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115602 | Demonstrate knowledge and understanding of the relevant terminology used in mining - range of underground coal, surface, underground hard rock | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 1 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate knowledge of basic terminology used in underground coal.

SPECIFIC OUTCOME 2

Demonstrate knowledge of basic terminology used in surface mining.

SPECIFIC OUTCOME 3

Demonstrate knowledge of basic terminology used in hard rock mining.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

4

Operate a Chain Saw

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---------------------|----------------------------|---------|
| 115696 | Operate a Chain Saw | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 1 | 1 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare to operate a Chain Saw.

SPECIFIC OUTCOME 2

Operate Chain Saw.

SPECIFIC OUTCOME 3

Monitor Chain Saw operations.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

5

Sharpen a drill bit using a drill bit sharpener

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115653 | Sharpen a drill bit using a drill bit sharpener | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 1 | 1 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Prepare to sharpen a drill bit.

SPECIFIC OUTCOME 2

Sharpen a drill bit.

SPECIFIC OUTCOME 3

Monitor drill bit sharpening operations.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

7

Transport and distribute fuel using a trailer fuel bowser

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115641 | Transport and distribute fuel using a trailer fuel bowser | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 1 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare to Transport and distribute fuel.

SPECIFIC OUTCOME 2

Transport and distribute fuel.

SPECIFIC OUTCOME 3

Monitor transporting and distributing operations.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

8

Transport and dump material using a mechanical dumper

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115605 | Transport and dump material using a mechanical dumper | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 1 | 1 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare to transport and dump material using a mechanical dumper.

SPECIFIC OUTCOME 2

Transport and dump material using a mechanical dumper.

SPECIFIC OUTCOME 3

Monitor transporting and dumping operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

9

Achieve excavation stability with support in a steep mining environment

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115672 | Achieve excavation stability with support in a steep mining environment | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate elementary knowledge and understanding of steep dipping reef environments.

SPECIFIC OUTCOME 2

Demonstrate knowledge of support installation to achieve excavation stability.

SPECIFIC OUTCOME 3

Prepare for support installation.

SPECIFIC OUTCOME 4

Install support.

SPECIFIC OUTCOME 5

Conduct a post installation procedure.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

10

Achieve excavation stability with support installation in high mining height areas in various geotechnical conditions

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115640 | Achieve excavation stability with support installation in high mining height areas in various geotechnical conditions | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge of support installation to achieve excavation stability.

SPECIFIC OUTCOME 2

Prepare for support installation.

SPECIFIC OUTCOME 3

Install support.

SPECIFIC OUTCOME 4

Conduct a post installation procedure.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

11

Analyse work content and identify workgroup needs

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115521 | Analyse work content and identify workgroup needs | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 5 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Analyse work content and identify competence requirements in relation to work demands.

SPECIFIC OUTCOME 2

Use job analysis information to define workplace requirements for job descriptions.

SPECIFIC OUTCOME 3

Produce selection criteria for recruitment to the work group.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

12

Break rock using a hydraulic Rockbreaker

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115612 | Break rock using a hydraulic Rockbreaker | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 13 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Prepare to break rock using a hydraulic rockbreaker.

SPECIFIC OUTCOME 2

Break rock using a hydraulic rockbreaker.

SPECIFIC OUTCOME 3

Monitor hydraulic rockbreaking operations.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

13

Carry out a close electrical inspection on a portable electrical equipment

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115560 | Carry out a close electrical inspection on a portable electrical equipment | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to carrying out a close electrical inspection.

SPECIFIC OUTCOME 2

Prepare to carry out a close electrical inspection on portable electrical equipment.

SPECIFIC OUTCOME 3

Carry out the close electrical inspection on portable electrical equipment.

SPECIFIC OUTCOME 4

Test the portable electrical equipment, and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

14

Carry out a close electrical inspection on an underground coal mining production machine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------------|
| 115504 | Carry out a close electrical inspection on an underground coal mining production machine | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 5 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to a close electrical inspection.

SPECIFIC OUTCOME 2

Prepare to inspect the machine.

SPECIFIC OUTCOME 3

Inspect the machine.

SPECIFIC OUTCOME 4

Test the machine and prepare for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

1

Transport personnel using a mini-bus taxi on mine property

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115617 | Transport personnel using a mini-bus taxi on mine property | | |
| SGB NAME | NSB ACRONYM | PROVIDER NAME | |
| SGB Mining and Minerals | NSB 06 | | |
| FIELD | SUBFIELD | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| ABET BAND | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| Undefined | Regular | Level 1 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare to transport personnel.

SPECIFIC OUTCOME 2

Transport personnel.

SPECIFIC OUTCOME 3

Monitor transporting operations.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

15

Carry out a detailed electrical inspection on a slag pot truck

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115537 | Carry out a detailed electrical inspection on a slag pot truck | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 1 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to a detailed electrical inspection on a slag pot truck.

SPECIFIC OUTCOME 2

Prepare to inspect the electrical system of the slag pot truck.

SPECIFIC OUTCOME 3

Inspect the electrical system of the slag pot truck.

SPECIFIC OUTCOME 4

Test the slag pot truck and prepare for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

16

Carry out a detailed inspection on a railway signalling system

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115508 | Carry out a detailed inspection on a railway signalling system | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to a detailed inspection on railway signalling system.

SPECIFIC OUTCOME 2

Prepare to inspect the railway signalling system.

SPECIFIC OUTCOME 3

Inspect the railway signalling system.

SPECIFIC OUTCOME 4

Test the railway signalling system for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

17

Classify material by means of a mechanical classifier

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115606 | Classify material by means of a mechanical classifier | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate knowledge relating to the classification of material.

SPECIFIC OUTCOME 2

Prepare to classify material.

SPECIFIC OUTCOME 3

Classify material.

SPECIFIC OUTCOME 4

Complete the duties pertaining to the classification process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

18

Conduct a routine mechanical inspection on a winder

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115688 | Conduct a routine mechanical inspection on a winder | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 8 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to conducting a routine mechanical inspection on a winder.

SPECIFIC OUTCOME 2

Prepare to conduct a routine mechanical inspection on a winder.

SPECIFIC OUTCOME 3

Conduct a routine mechanical inspection on a winder.

SPECIFIC OUTCOME 4

Complete the routine mechanical inspection process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

19

Conduct basic sampling and testing procedures in cement, lime and aggregates industry

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115531 | Conduct basic sampling and testing procedures in cement, lime and aggregates industry | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 4 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the principles related to sampling and testing.

SPECIFIC OUTCOME 2

Collect samples and prepare them for testing.

SPECIFIC OUTCOME 3

Conduct basic quality tests.

SPECIFIC OUTCOME 4

Follow basic health and safety practices during sampling and testing.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

20

Conduct fire fighting in surface mines

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115613 | Conduct fire fighting in surface mines | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 16 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Plan and prepare for work.

SPECIFIC OUTCOME 2

Fight or contain fires.

SPECIFIC OUTCOME 3

Monitor and finalise the fire-fighting operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

21

Cut metal by means of a plasma cutter

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---------------------------------------|--------------------------------|---------|
| 115542 | Cut metal by means of a plasma cutter | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Engineering and Related Design | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-ENG-0-SGB MM | Regular | Level 2 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to cutting metal by means of a plasma cutter.

SPECIFIC OUTCOME 2

Prepare to cut metal by means of a plasma cutter.

SPECIFIC OUTCOME 3

Cut the metal by means of a plasma cutter.

SPECIFIC OUTCOME 4

Complete the metal cutting process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

22

De-water material by means of a de-watering screen

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115592 | De-water material by means of a de-watering screen | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate knowledge relating to the de-watering of material.

SPECIFIC OUTCOME 2

Prepare to de-water material.

SPECIFIC OUTCOME 3

De-water material.

SPECIFIC OUTCOME 4

Complete the duties pertaining to the de-watering process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

23

Demonstrate a basic knowledge and understanding of the generic artificial support types, their characteristics and applications

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115702 | Demonstrate a basic knowledge and understanding of the generic artificial support types, their characteristics and applications | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate basic knowledge of the generic support types.

SPECIFIC OUTCOME 2

Demonstrate basic understanding of the characteristics of support.

SPECIFIC OUTCOME 3

Demonstrate basic understanding of the application of the support types.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

24

Demonstrate a basic understanding of rock strengths and relevant testing methods

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115665 | Demonstrate a basic understanding of rock strengths and relevant testing methods | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate basic knowledge of the strength variation of rock types.

SPECIFIC OUTCOME 2

Demonstrate basic knowledge of the need for determining rock strengths.

SPECIFIC OUTCOME 3

Demonstrate basic knowledge of methods and instrumentation available to conduct rock strength tests.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

25

Demonstrate a basic understanding of support principles

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115652 | Demonstrate a basic understanding of support principles | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate basic knowledge of support principles.

SPECIFIC OUTCOME 2

Demonstrate understanding of the importance of support principles.

SPECIFIC OUTCOME 3

Demonstrate basic knowledge of the application of support principles.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

26

Demonstrate a basic understanding of the concept of a Ground Control District

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115637 | Demonstrate a basic understanding of the concept of a Ground Control District | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 1 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate understanding of classifying areas according to the associated ground control hazard.

SPECIFIC OUTCOME 2

Demonstrate a basic knowledge of standards related to mine-specific Ground Control Districts.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

27

Demonstrate a basic understanding of the principles of monitoring and instrumentation and the ability to take basic measurements from installed instrumentation

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115662 | Demonstrate a basic understanding of the principles of monitoring and instrumentation and the ability to take basic measurements from installed instrumentation | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate basic knowledge of the effect of mining on the rock mass.

SPECIFIC OUTCOME 2

Demonstrate basic knowledge of the need for monitoring rock mass behaviour.

SPECIFIC OUTCOME 3

Demonstrate basic understanding of monitoring methods and instrumentation available.

SPECIFIC OUTCOME 4

Demonstrate the ability to take measurements from basic instrumentation.

SPECIFIC OUTCOME 5

Demonstrate knowledge of the consequences of inadequate monitoring.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

28

Demonstrate a basic understanding of various types of pillars and their role as a support medium

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115649 | Demonstrate a basic understanding of various types of pillars and their role as a support medium | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate basic knowledge of the support function of pillars in mining.

SPECIFIC OUTCOME 2

Demonstrate basic knowledge of the role of various types of pillars used in mining.

SPECIFIC OUTCOME 3

Demonstrate knowledge of the consequences of not adhering to pillar design criteria.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

29

Demonstrate an understanding and operation of water reticulation systems in a surface mine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115647 | Demonstrate an understanding and operation of water reticulation systems in a surface mine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 6 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the construction of pump stations and sumps.

SPECIFIC OUTCOME 2

Explain the installation of pipe columns.

SPECIFIC OUTCOME 3

Explain the principle of operation and application of different types of pumps.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

30

Demonstrate an understanding and use of a computer

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115524 | Demonstrate an understanding and use of a computer | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare to use a computer.

SPECIFIC OUTCOME 2

Access and update information.

SPECIFIC OUTCOME 3

Retrieve information.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

31

Demonstrate an understanding of basic risk assessment concepts and processes

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115558 | Demonstrate an understanding of basic risk assessment concepts and processes | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 1 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate understanding of the basic concepts used in risk assessment processes.

SPECIFIC OUTCOME 2

Demonstrate knowledge of the risk assessment process.

SPECIFIC OUTCOME 3

Describe basic controls to address risk.

SPECIFIC OUTCOME 4

Demonstrate understanding of communication of recognised hazards and associated risks.

SPECIFIC OUTCOME 5

Demonstrate basic knowledge of monitoring of risk.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

32

Demonstrate an understanding of budget and cost control

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115674 | Demonstrate an understanding of budget and cost control | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 1 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Monitor budgets and costs.

SPECIFIC OUTCOME 2

Control costs within budget.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

33

Demonstrate an understanding of the importance of support installation quality

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115658 | Demonstrate an understanding of the importance of support installation quality | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate basic knowledge of installation requirements of generic support types.

SPECIFIC OUTCOME 2

Demonstrate basic knowledge and understanding of support installation criteria.

SPECIFIC OUTCOME 3

Demonstrate understanding of the consequences of poorly installed support.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

34

Demonstrate an understanding of the rehabilitation using topsoil process

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115635 | Demonstrate an understanding of the rehabilitation using topsoil process | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Plan and prepare for topsoil stockpiling.

SPECIFIC OUTCOME 2

Conduct stockpiling.

SPECIFIC OUTCOME 3

Monitor stockpile activities.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

35

Demonstrate basic knowledge and understanding of geology related to mining

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115678 | Demonstrate basic knowledge and understanding of geology related to mining | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 1 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate basic knowledge and understanding of the various minerals being mined.

SPECIFIC OUTCOME 2

Demonstrate basic knowledge of the mine-specific rock mass hosting the mineral deposit.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

36

Demonstrate basic knowledge and understanding of the interrelationship between rock strength, stress and fracturing

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115631 | Demonstrate basic knowledge and understanding of the interrelationship between rock strength, stress and fracturing | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate basic knowledge of stress in the mining environment.

SPECIFIC OUTCOME 2

Demonstrate basic knowledge of rock strength.

SPECIFIC OUTCOME 3

Demonstrate basic knowledge of the effects of stress on the rock mass.

SPECIFIC OUTCOME 4

Demonstrate basic knowledge of the effect of stress on excavation stability.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

37

Demonstrate basic knowledge of ensuring excavation stability when re-opening an excavation after a period of time

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115675 | Demonstrate basic knowledge of ensuring excavation stability when re-opening an excavation after a period of time | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the risks associated with hazards encountered when re-opening excavations.

SPECIFIC OUTCOME 2

Demonstrate the ability to identify hazards associated with ground conditions and support units.

SPECIFIC OUTCOME 3

Demonstrate ability to assess the implementation of remedial action.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

38

Demonstrate basic knowledge of restoring excavation stability following loss of excavation integrity

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------------|
| 115655 | Demonstrate basic knowledge of restoring excavation stability following loss of excavation integrity | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge of the causes of loss of excavation integrity.

SPECIFIC OUTCOME 2

Demonstrate understanding of the risks associated with re-opening excavations and remedial action.

SPECIFIC OUTCOME 3

Demonstrate ability to identify sub-standard ground conditions and support units.

SPECIFIC OUTCOME 4

Demonstrate ability to assess the implementation of remedial action.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

39

Demonstrate basic knowledge of, and ability to record results from, instrumentation applicable to Rock Engineering

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115680 | Demonstrate basic knowledge of, and ability to record results from, instrumentation applicable to Rock Engineering | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate basic knowledge of the type of instrumentation used in Rock Engineering.

SPECIFIC OUTCOME 2

Demonstrate basic knowledge of the application of instrumentation used in Rock Engineering.

SPECIFIC OUTCOME 3

Demonstrate the ability to take and record readings of basic Rock Engineering instrumentation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

40

Demonstrate knowledge of various slope failure modes

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115692 | Demonstrate knowledge of various slope failure modes | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate basic knowledge of the response of rock mass to surface mining.

SPECIFIC OUTCOME 2

Demonstrate knowledge of the basic slope failure modes.

SPECIFIC OUTCOME 3

Demonstrate basic knowledge of the parameters that influence potential slope failure.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

41

Demonstrate the ability to assess poor quality support installations

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115703 | Demonstrate the ability to assess poor quality support installations | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate basic knowledge of methods available for assessing the quality of support installations.

SPECIFIC OUTCOME 2

Demonstrate knowledge of the signs of poor quality support installation.

SPECIFIC OUTCOME 3

Record and report poor quality support installation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

42

Demonstrate the ability to manage conflict

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------------|
| 115519 | Demonstrate the ability to manage conflict | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 1 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Identify potential sources of conflict.

SPECIFIC OUTCOME 2

Identify range of alternative approaches.

SPECIFIC OUTCOME 3

Resolve conflict.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

43

Dispatch bullion

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|----------------------------|---------------|---------|
| 115601 | Dispatch bullion | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge relating to the dispatch process.

SPECIFIC OUTCOME 2

Prepare to dispatch bullion.

SPECIFIC OUTCOME 3

Dispatch bullion.

SPECIFIC OUTCOME 4

Complete the duties pertaining to the dispatch process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

44

Draw up a material list as per task requirement

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115624 | Draw up a material list as per task requirement | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate an understanding of different materials, metals and profiles.

SPECIFIC OUTCOME 2

Draw up a list of material required from given drawings.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

45

Dry material by means of a fluidised bed dryer

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115707 | Dry material by means of a fluidised bed dryer | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 4 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate knowledge relating to the drying of material by means of a fluidised bed dryer.

SPECIFIC OUTCOME 2

Prepare to dry material.

SPECIFIC OUTCOME 3

Dry material.

SPECIFIC OUTCOME 4

Complete the duties pertaining to the drying process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

46

Fabricate a steel pipe section by using the contour marker method

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|--------------------------------|---------|
| 115539 | Fabricate a steel pipe section by using the contour marker method | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Engineering and Related Design | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-ENG-0-SGB MM | Regular | Level 2 | 6 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to repairing steel pipe sections.

SPECIFIC OUTCOME 2

Prepare to repair a steel pipe section.

SPECIFIC OUTCOME 3

Repair the steel pipe section.

SPECIFIC OUTCOME 4

Complete the repairing process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

47

Fabricate steel components

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|----------------------------|--------------------------------|---------------|
| 115536 | Fabricate steel components | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Engineering and Related Design | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-ENG-0-SGB MM | Regular | Level 2 | 5 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to the fabrication of steel components.

SPECIFIC OUTCOME 2

Prepare to fabricate steel components.

SPECIFIC OUTCOME 3

Fabricate the steel components.

SPECIFIC OUTCOME 4

Complete the fabrication process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

48

Fasten components by means of a huckbolt

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115611 | Fasten components by means of a huckbolt | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 1 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to fastening components by means of huckbolts.

SPECIFIC OUTCOME 2

Prepare to fasten components by means of huckbolts.

SPECIFIC OUTCOME 3

Fasten the components by means of huckbolts.

SPECIFIC OUTCOME 4

Complete the process and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

49

Generate steam by means of an electric boiler

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115569 | Generate steam by means of an electric boiler | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge relating to the generation of steam.

SPECIFIC OUTCOME 2

Prepare to generate steam.

SPECIFIC OUTCOME 3

Generate steam.

SPECIFIC OUTCOME 4

Complete the duties pertaining to the steam generation process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

50

Grind material by means of an ISA mill

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115642 | Grind material by means of an ISA mill | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 8 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge relating to grinding material by means of an ISA mill.

SPECIFIC OUTCOME 2

Prepare to grind material.

SPECIFIC OUTCOME 3

Grind material.

SPECIFIC OUTCOME 4

Complete duties pertaining to the grinding process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

51

Grind steel by means of an angle grinder

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115679 | Grind steel by means of an angle grinder | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to grinding steel by means of an angle grinder.

SPECIFIC OUTCOME 2

Prepare to grind steel by means of an angle grinder.

SPECIFIC OUTCOME 3

Grind steel by means of an angle grinder.

SPECIFIC OUTCOME 4

Complete the grinding process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

52

Handle cyanide safely in a laboratory

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---------------------------------------|--------------------------------|---------|
| 115505 | Handle cyanide safely in a laboratory | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Engineering and Related Design | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-ENG-0-SGB MM | Regular | Level 2 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge relating to the handling of cyanide.

SPECIFIC OUTCOME 2

Prepare to handle cyanide.

SPECIFIC OUTCOME 3

Handle cyanide.

SPECIFIC OUTCOME 4

Complete the duties pertaining to cyanide handling.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

53

Handle flexible electrical cables

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|-----------------------------------|---------------|---------|
| 115538 | Handle flexible electrical cables | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to handling flexible electrical cables.

SPECIFIC OUTCOME 2

Prepare to handle a flexible electrical cable.

SPECIFIC OUTCOME 3

Handle the flexible electrical cable.

SPECIFIC OUTCOME 4

Complete the cable handling process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

54

Inspect a safety detaching hook

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---------------------------------|----------------------------|---------------|
| 115567 | Inspect a safety detaching hook | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to inspecting a safety detaching hook.

SPECIFIC OUTCOME 2

Prepare to inspect a safety detaching hook.

SPECIFIC OUTCOME 3

Inspect the safety detaching hook.

SPECIFIC OUTCOME 4

Complete the inspection process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

55

Inspect and charge a traction battery

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---------------------------------------|----------------------------|---------------|
| 115556 | Inspect and charge a traction battery | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to inspect and charge a traction battery.

SPECIFIC OUTCOME 2

Prepare to inspect and charge the traction battery.

SPECIFIC OUTCOME 3

Inspect and charge the traction battery.

SPECIFIC OUTCOME 4

Confirm traction battery condition and prepare for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

57

Install an electrical overhead power distribution line operating at a voltage up to 33kV

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115580 | Install an electrical overhead power distribution line operating at a voltage up to 33kV | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to installing an electrical overhead power distribution line.

SPECIFIC OUTCOME 2

Prepare to install the overhead power distribution line.

SPECIFIC OUTCOME 3

Install the overhead power distribution line.

SPECIFIC OUTCOME 4

Complete the installation process and perform reporting and housekeeping duties.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

58

Install domestic type fixed units

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|-----------------------------------|-----------------------------|----------------------|
| 115510 | Install domestic type fixed units | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to installing domestic type fixed units.

SPECIFIC OUTCOME 2

Prepare to install a domestic type fixed unit.

SPECIFIC OUTCOME 3

Install the unit.

SPECIFIC OUTCOME 4

Test the unit and prepare for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

59

Join metal by means of a spot welder

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--------------------------------------|---------------|---------|
| 115735 | Join metal by means of a spot welder | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 1 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to joining metal by means of a spot welder.

SPECIFIC OUTCOME 2

Prepare to join the metal by means of a spot welder.

SPECIFIC OUTCOME 3

Join the metal by means of a spot welder.

SPECIFIC OUTCOME 4

Complete the spot welding process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

60

Lubricate earth moving equipment

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|----------------------------------|---------------|---------|
| 115713 | Lubricate earth moving equipment | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to lubricating earth-moving equipment.

SPECIFIC OUTCOME 2

Prepare to lubricate earth-moving equipment.

SPECIFIC OUTCOME 3

Lubricate the earth moving equipment.

SPECIFIC OUTCOME 4

Complete the lubrication process and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

61

Maintain the catalyst in a sulphur dioxide converter

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115618 | Maintain the catalyst in a sulphur dioxide converter | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge relating to the maintenance of the catalyst load.

SPECIFIC OUTCOME 2

Determine catalyst replacement requirements.

SPECIFIC OUTCOME 3

Prepare to load catalyst.

SPECIFIC OUTCOME 4

Load catalyst.

SPECIFIC OUTCOME 5

Complete the duties relating to the maintenance of catalyst load.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

62

Make-up a sodium sulphate solution in a metallurgical plant

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115698 | Make-up a sodium sulphate solution in a metallurgical plant | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 4 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate knowledge relating to the make-up of a sodium sulphate solution.

SPECIFIC OUTCOME 2

Prepare to make-up a sodium sulphate solution.

SPECIFIC OUTCOME 3

Make-up a sodium sulphate solution.

SPECIFIC OUTCOME 4

Complete the duties pertaining to the make-up of a sodium sulphate solution.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

63

Measure and mark off steel profiles

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|-------------------------------------|--------------------------------|---------|
| 115533 | Measure and mark off steel profiles | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Engineering and Related Design | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-ENG-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to measuring and marking off steel profiles.

SPECIFIC OUTCOME 2

Prepare to measure and mark off the steel profiles.

SPECIFIC OUTCOME 3

Measure and mark off the steel profiles.

SPECIFIC OUTCOME 4

Complete the measuring and marking off process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

64

Monitor the moving of trailing cables using a Cable Reeler

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115526 | Monitor the moving of trailing cables using a Cable Reeler | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 8 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Monitor the preparation of moving trailing cables.

SPECIFIC OUTCOME 2

Monitor the moving of trailing cables using a cable reeler.

SPECIFIC OUTCOME 3

Monitor Cable Reeler operations.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

65

Off-load liquid oxygen from a tanker into a bulk storage facility

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115579 | Off-load liquid oxygen from a tanker into a bulk storage facility | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge relating to the off-loading of liquid oxygen.

SPECIFIC OUTCOME 2

Prepare to off-load liquid oxygen.

SPECIFIC OUTCOME 3

Off-load liquid oxygen.

SPECIFIC OUTCOME 4

Complete the duties pertaining to the off-loading process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

66

Operate the global positioning system (GPS)

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115638 | Operate the global positioning system (GPS) | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 5 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Prepare and plan the surveying process with global positioning system.

SPECIFIC OUTCOME 2

Implement surveying.

SPECIFIC OUTCOME 3

Monitor the global positioning system operations.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

67

Overhaul a 3-phase induction motor

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|------------------------------------|----------------------------|---------|
| 115700 | Overhaul a 3-phase induction motor | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to overhaul 3-phase induction motors.

SPECIFIC OUTCOME 2

Prepare to dismantle, inspect and re-assemble the motor.

SPECIFIC OUTCOME 3

Dismantle, inspect and re-assemble the motor.

SPECIFIC OUTCOME 4

Test the motor and perform reporting and housekeeping duties.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

68

Overhaul a final drive/planetary system of a self-propelled mobile machine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115778 | Overhaul a final drive/planetary system of a self-propelled mobile machine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 4 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to overhauling final drive/planetary system of self-propelled machine.

SPECIFIC OUTCOME 2

Prepare to overhaul a final drive/planetary system.

SPECIFIC OUTCOME 3

Overhaul a final drive/planetary system.

SPECIFIC OUTCOME 4

Test the overhauled final drive/planetary system and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

69

Perform standard aggregates physical tests

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115553 | Perform standard aggregates physical tests | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 16 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the principles related to aggregates physical testing.

SPECIFIC OUTCOME 2

Prepare for physical testing.

SPECIFIC OUTCOME 3

Conduct physical tests.

SPECIFIC OUTCOME 4

Interpret and report physical testing results.

SPECIFIC OUTCOME 5

Follow basic health and safety practices during physical testing.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

70

Perform standard cement industry physical tests

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115543 | Perform standard cement industry physical tests | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 13 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the principles related to physical testing.

SPECIFIC OUTCOME 2

Prepare for physical testing.

SPECIFIC OUTCOME 3

Conduct physical tests.

SPECIFIC OUTCOME 4

Interpret and report physical testing results.

SPECIFIC OUTCOME 5

Follow basic health and safety practices during physical testing.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

71

Plan and conduct interviews

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|-----------------------------|----------------------------|---------|
| 115785 | Plan and conduct interviews | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Plan interviews.

SPECIFIC OUTCOME 2

Conduct interview.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

72

Plan and organise individual work

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|-----------------------------------|----------------------------|---------|
| 115610 | Plan and organise individual work | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 5 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Plan and prepare for work.

SPECIFIC OUTCOME 2

Complete work as planned.

SPECIFIC OUTCOME 3

Monitor work performance.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

73

Pull electrodes in an electro-winning process

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115639 | Pull electrodes in an electro-winning process | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge relating to the pulling of electrodes.

SPECIFIC OUTCOME 2

Prepare to pull electrodes.

SPECIFIC OUTCOME 3

Pull electrodes.

SPECIFIC OUTCOME 4

Complete the duties pertaining to the pulling of electrodes.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

74

Pulverise a Platinum Group Metal

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|----------------------------------|----------------------------|---------------|
| 115712 | Pulverise a Platinum Group Metal | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate knowledge relating to pulverising a Platinum Group Metal.

SPECIFIC OUTCOME 2

Prepare to pulverise a Platinum Group Metal.

SPECIFIC OUTCOME 3

Pulverise a Platinum Group Metal.

SPECIFIC OUTCOME 4

Complete the duties pertaining to the pulverising process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

75

Receive and register samples in a laboratory

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|--------------------------------|---------|
| 115501 | Receive and register samples in a laboratory | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Engineering and Related Design | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-ENG-0-SGB MM | Regular | Level 2 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge relating to receipt and registration of samples.

SPECIFIC OUTCOME 2

Receive and register samples.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

76

Recover a vehicle with manual transmission

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115754 | Recover a vehicle with manual transmission | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 1 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to recovering a vehicle with a manual transmission.

SPECIFIC OUTCOME 2

Prepare to recover a vehicle with manual transmission.

SPECIFIC OUTCOME 3

Recover a vehicle with manual transmission.

SPECIFIC OUTCOME 4

Complete the vehicle recovery process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

77

Recover uranium from solution by means of chemical precipitation

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115616 | Recover uranium from solution by means of chemical precipitation | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 7 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge relating to the recovery of uranium from a solution by means of precipitation.

SPECIFIC OUTCOME 2

Prepare to precipitate uranium.

SPECIFIC OUTCOME 3

Precipitate uranium.

SPECIFIC OUTCOME 4

Complete the duties pertaining to the precipitation process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

80

Repair planetary gear system

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|------------------------------|---------------|---------|
| 115765 | Repair planetary gear system | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 4 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to repairing a planetary gear system.

SPECIFIC OUTCOME 2

Prepare to repair a planetary gear system.

SPECIFIC OUTCOME 3

Repair a planetary gear system.

SPECIFIC OUTCOME 4

Test the planetary gear system and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

81

Replace a differential on a self-propelled mobile machine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115557 | Replace a differential on a self-propelled mobile machine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to replacing a differential of a self-propelled mobile machine.

SPECIFIC OUTCOME 2

Prepare to replace the differential.

SPECIFIC OUTCOME 3

Replace the differential.

SPECIFIC OUTCOME 4

Test the differential, and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

82

Replace a rotary head on an overburden drill

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115764 | Replace a rotary head on an overburden drill | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to replacing a rotary head on an overburden drill.

SPECIFIC OUTCOME 2

Prepare to replace the rotary head.

SPECIFIC OUTCOME 3

Replace the rotary head.

SPECIFIC OUTCOME 4

Test the overburden drill and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

83

Replace a steering box on a self-propelled mobile machine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115561 | Replace a steering box on a self-propelled mobile machine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to replacing a steering box of a self-propelled mobile machine.

SPECIFIC OUTCOME 2

Prepare to replace the steering box.

SPECIFIC OUTCOME 3

Replace the steering box.

SPECIFIC OUTCOME 4

Test the steering box, and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

84

Replace components on a jaw type crusher

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115656 | Replace components on a jaw type crusher | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to replacing components on a jaw type crusher.

SPECIFIC OUTCOME 2

Prepare to replace components on a jaw type crusher.

SPECIFIC OUTCOME 3

Replace components on a jaw type crusher.

SPECIFIC OUTCOME 4

Test the jaw type crusher, and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

85

Replace components on a liquid cooling system of a self-propelled mobile machine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------------|
| 115563 | Replace components on a liquid cooling system of a self-propelled mobile machine | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to replacing cooling system components.

SPECIFIC OUTCOME 2

Prepare to replace the cooling system components.

SPECIFIC OUTCOME 3

Replace the cooling system components.

SPECIFIC OUTCOME 4

Test the cooling system and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

86

Replace components on the boom assembly of a back actor

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115769 | Replace components on the boom assembly of a back actor | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to replacing components on the boom assembly of a back actor.

SPECIFIC OUTCOME 2

Prepare to replace components on the boom assembly of a back actor.

SPECIFIC OUTCOME 3

Replace components on the boom assembly of a back actor.

SPECIFIC OUTCOME 4

Test the back actor and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

87

Replace conveyor belt steel structures (stringers, cradles)

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|--------------------------------|---------|
| 115547 | Replace conveyor belt steel structures (stringers, cradles) | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Engineering and Related Design | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-ENG-0-SGB MM | Regular | Level 2 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to replacing conveyor belt steel structures (stringers, cradles).

SPECIFIC OUTCOME 2

Prepare to replace the stringers and cradles on a conveyor belt installation.

SPECIFIC OUTCOME 3

Replace stringers and cradles on a conveyor belt installation.

SPECIFIC OUTCOME 4

Test the conveyor belt installation and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

88

Replace dipper handles and dipper on a rope shovel

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115766 | Replace dipper handles and dipper on a rope shovel | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to replacing dipper handles and dipper on a rope shovel.

SPECIFIC OUTCOME 2

Prepare to replace dipper handles and dipper.

SPECIFIC OUTCOME 3

Replace the dipper handles and dipper.

SPECIFIC OUTCOME 4

Test the rope shovel and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

89

Replace fuel system components on a self-propelled mobile machine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115570 | Replace fuel system components on a self-propelled mobile machine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to replacing fuel system components on a self-propelled mobile machine.

SPECIFIC OUTCOME 2

Prepare to replace the fuel system components.

SPECIFIC OUTCOME 3

Replace the fuel system components.

SPECIFIC OUTCOME 4

Test the fuel system, and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

90

Replace hoist ropes on a rope shovel

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--------------------------------------|----------------------------|---------|
| 115771 | Replace hoist ropes on a rope shovel | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to replacing hoist ropes on a rope shovel.

SPECIFIC OUTCOME 2

Prepare to replace the hoist ropes.

SPECIFIC OUTCOME 3

Replace the hoist ropes.

SPECIFIC OUTCOME 4

Test the rope shovel and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

91

Replace tandem drive of self-propelled machine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115720 | Replace tandem drive of self-propelled machine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to replacing undercarriage components of earth moving equipment.

SPECIFIC OUTCOME 2

Prepare to replace undercarriage components.

SPECIFIC OUTCOME 3

Replace undercarriage components.

SPECIFIC OUTCOME 4

Test the vehicle of which the undercarriage components were replaced and prepare for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

92

Replace the boom on a hydraulic face drill rig

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115724 | Replace the boom on a hydraulic face drill rig | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to replacing the boom on a hydraulic face drill rig.

SPECIFIC OUTCOME 2

Prepare to replace the boom on a hydraulic face drill rig.

SPECIFIC OUTCOME 3

Replace the boom on a hydraulic face drill rig.

SPECIFIC OUTCOME 4

Test the boom on a hydraulic face drill rig and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

93

Replace the bucket assembly of a dragline

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115727 | Replace the bucket assembly of a dragline | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to replacing the bucket assembly of a dragline.

SPECIFIC OUTCOME 2

Prepare to replace the bucket assembly of a dragline.

SPECIFIC OUTCOME 3

Replace the bucket assembly of a dragline.

SPECIFIC OUTCOME 4

Test the bucket assembly of a dragline and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

94

Replace the crusher drum on a feeder breaker

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115730 | Replace the crusher drum on a feeder breaker | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to replacing the crusher drum on a feeder breaker.

SPECIFIC OUTCOME 2

Prepare to replace the crusher drum on a feeder breaker.

SPECIFIC OUTCOME 3

Replace the crusher drum on a feeder breaker.

SPECIFIC OUTCOME 4

Test the crusher drum on a feeder breaker and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

95

Replace the cutter head assembly on a coal cutter

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115718 | Replace the cutter head assembly on a coal cutter | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to replacing cutter head assemblies on coal cutters.

SPECIFIC OUTCOME 2

Prepare to replace the cutter head assembly on a coal cutter.

SPECIFIC OUTCOME 3

Replace the cutter head assembly on a coal cutter.

SPECIFIC OUTCOME 4

Test the cutter head assembly on the coal cutter and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

96

Replace the drive shaft of a self-propelled mobile machine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115747 | Replace the drive shaft of a self-propelled mobile machine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 1 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to drive shafts of self-propelled mobile machines.

SPECIFIC OUTCOME 2

Prepare to replace drive shafts.

SPECIFIC OUTCOME 3

Replace drive shafts.

SPECIFIC OUTCOME 4

Test the drive shaft and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

97

Replace the fair-lead frame on a dragline

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115732 | Replace the fair-lead frame on a dragline | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to replacing the fairlead frame of a dragline.

SPECIFIC OUTCOME 2

Prepare to replace the fairlead frame of a dragline.

SPECIFIC OUTCOME 3

Replace the fairlead frame of a dragline.

SPECIFIC OUTCOME 4

Test the fairlead frame of a dragline and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

98

Replace the saddle block of a rope shovel

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115767 | Replace the saddle block of a rope shovel | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to replacing saddle blocks on a rope shovel.

SPECIFIC OUTCOME 2

Prepare to replace the saddle block.

SPECIFIC OUTCOME 3

Replace the saddle block.

SPECIFIC OUTCOME 4

Test the rope shovel and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

99

Replace track pads on earth moving equipment

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115760 | Replace track pads on earth moving equipment | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to replacing track pads on earth moving equipment.

SPECIFIC OUTCOME 2

Prepare to replace track pad on earth moving equipment.

SPECIFIC OUTCOME 3

Replace track pad on earth moving equipment.

SPECIFIC OUTCOME 4

Test the machine and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

100

Replace tracks of earth moving equipment

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115716 | Replace tracks of earth moving equipment | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to replacing tracks of earth moving equipment.

SPECIFIC OUTCOME 2

Prepare to replace tracks.

SPECIFIC OUTCOME 3

Replace the tracks.

SPECIFIC OUTCOME 4

Test the tracks and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

101

Replace undercarriage components of earth moving equipment

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115711 | Replace undercarriage components of earth moving equipment | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to replacing undercarriage components of earth moving equipment.

SPECIFIC OUTCOME 2

Prepare to replace undercarriage components.

SPECIFIC OUTCOME 3

Replace undercarriage components.

SPECIFIC OUTCOME 4

Test the vehicle of which the undercarriage components were replaced and prepare for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

102

Retrieve minerals from sand dunes using a floating dredger

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115669 | Retrieve minerals from sand dunes using a floating dredger | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 16 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Prepare to retrieve minerals.

SPECIFIC OUTCOME 2

Retrieve minerals.

SPECIFIC OUTCOME 3

Monitor retrieving operations.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

103

Separate liquid from solids by means of a Larox vacuum pressure filter

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115660 | Separate liquid from solids by means of a Larox vacuum pressure filter | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 6 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge relating to the separation of liquid from solids.

SPECIFIC OUTCOME 2

Prepare to separate liquid from solids.

SPECIFIC OUTCOME 3

Separate liquid from solids.

SPECIFIC OUTCOME 4

Complete duties pertaining to the filtration process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

104

Service equipment using a service truck

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------------|
| 115630 | Service equipment using a service truck | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 6 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare to service equipment using a service truck.

SPECIFIC OUTCOME 2

Service equipment using a service truck.

SPECIFIC OUTCOME 3

Monitor servicing operations.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

105

Solve individual work problems

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--------------------------------|---------------|---------|
| 115518 | Solve individual work problems | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 1 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Define the problem.

SPECIFIC OUTCOME 2

Identify the preferred option for solving the problem.

SPECIFIC OUTCOME 3

Prepare and implement action plan.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

106

Straighten steel profiles

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---------------------------|--------------------------------|---------|
| 115529 | Straighten steel profiles | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Engineering and Related Design | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-ENG-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to straightening steel profiles.

SPECIFIC OUTCOME 2

Prepare to straighten steel profiles.

SPECIFIC OUTCOME 3

Straighten the steel profiles.

SPECIFIC OUTCOME 4

Complete the straightening process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

107

Support in blasting operations

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--------------------------------|----------------------------|---------|
| 115527 | Support in blasting operations | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare to charge shot holes.

SPECIFIC OUTCOME 2

Charge shot holes.

SPECIFIC OUTCOME 3

Demonstrate relevant legal knowledge of explosives and accessories.

SPECIFIC OUTCOME 4

Demonstrate knowledge of types of explosives and accessories.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

108

Tap material from a furnace by means of lancing

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------------|
| 115719 | Tap material from a furnace by means of lancing | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 6 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate knowledge relating to the tapping of material by means of lancing.

SPECIFIC OUTCOME 2

Prepare to tap material.

SPECIFIC OUTCOME 3

Tap material.

SPECIFIC OUTCOME 4

Complete the duties pertaining to the tapping process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

109

Use and care for engineering hand tools

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115779 | Use and care for engineering hand tools | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain theoretical knowledge of the principles related to the use of hand held Engineering tools.

SPECIFIC OUTCOME 2

Care for hand held tools.

SPECIFIC OUTCOME 3

Use hand held tools.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

110

Use and care for hand held power tools

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------------|
| 115654 | Use and care for hand held power tools | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 2 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to using and caring for hand held power tools.

SPECIFIC OUTCOME 2

Prepare to use and care for hand held power tools.

SPECIFIC OUTCOME 3

Care for hand held power tools.

SPECIFIC OUTCOME 4

Use the hand held power tools.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

111

Adjust wheel alignment on a self-propelled mobile machine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115682 | Adjust wheel alignment on a self-propelled mobile machine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to adjusting wheel alignment of self-propelled mobile machines.

SPECIFIC OUTCOME 2

Prepare to adjust wheel alignment.

SPECIFIC OUTCOME 3

Adjust wheel alignment.

SPECIFIC OUTCOME 4

Test the wheel alignment and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

112

Apply elementary calculations of mass and force to strata control

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115734 | Apply elementary calculations of mass and force to strata control | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Calculate the weight of the strata based on local geotechnical conditions.

SPECIFIC OUTCOME 2

Calculate support resistances required to support the strata in the local geotechnical conditions.

SPECIFIC OUTCOME 3

Demonstrate elementary understanding of the concept of energy absorption.

SPECIFIC OUTCOME 4

Apply the concepts of support resistance and energy absorption to assess support systems.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

113

Apply lockout and earthing procedures on an overhead power distribution line operating at a voltage up to 33kV

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115781 | Apply lockout and earthing procedures on an overhead power distribution line operating at a voltage up to 33kV | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain factors critical to isolating, locking out, earthing procedures on overhead power lines.

SPECIFIC OUTCOME 2

Prepare to isolate, lockout and earth the overhead power distribution line.

SPECIFIC OUTCOME 3

Isolate, lockout and earth the overhead power distribution line.

SPECIFIC OUTCOME 4

Restore power to the overhead power distribution line and prepare for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

114

Apply the risk assessment process to rock related hazards

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115646 | Apply the risk assessment process to rock related hazards | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate a basic knowledge of the conditions that potentially result in fall of ground hazards.

SPECIFIC OUTCOME 2

Demonstrate the ability to identify the hazards and determine risks associated with falls of ground.

SPECIFIC OUTCOME 3

Demonstrate the ability to implement appropriate controls.

SPECIFIC OUTCOME 4

Demonstrate ability to communicate recognised hazards and associated risks.

SPECIFIC OUTCOME 5

Demonstrate ability to monitor the risk.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

115

Blend platinum group metal liquors

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|------------------------------------|---------------|---------|
| 115566 | Blend platinum group metal liquors | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 6 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge relating to the blending of liquors.

SPECIFIC OUTCOME 2

Prepare to blend liquors.

SPECIFIC OUTCOME 3

Blend liquors.

SPECIFIC OUTCOME 4

Complete the duties pertaining to the blending process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

116

Butt-weld a pipe in position

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|------------------------------|----------------------------|---------|
| 115745 | Butt-weld a pipe in position | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 9 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to butt-welding pipes in position.

SPECIFIC OUTCOME 2

Prepare to butt-weld a pipe in position.

SPECIFIC OUTCOME 3

Butt-weld the pipe in position.

SPECIFIC OUTCOME 4

Complete the arc welding process and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

117

Carry out a close electrical inspection on electrical powered surface mining machines

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------------|
| 115782 | Carry out a close electrical inspection on electrical powered surface mining machines | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to a close electrical inspection on electrical powered surface.

SPECIFIC OUTCOME 2

Prepare to inspect the machine.

SPECIFIC OUTCOME 3

Inspect the machine.

SPECIFIC OUTCOME 4

Test the machine and prepare for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

118

Carry out a detailed electrical inspection on a boiler

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115517 | Carry out a detailed electrical inspection on a boiler | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to inspecting a boiler.

SPECIFIC OUTCOME 2

Prepare to inspect the boiler.

SPECIFIC OUTCOME 3

Inspect the boiler.

SPECIFIC OUTCOME 4

Test the boiler and prepare for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

119

Carry out a detailed electrical inspection on a charging system for cap lamps, gas testing and monitoring devices

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------------|
| 115554 | Carry out a detailed electrical inspection on a charging system for cap lamps, gas testing and monitoring devices | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to a detailed electrical inspection on a charging system.

SPECIFIC OUTCOME 2

Prepare to inspect the charging system for cap lamps, gas testing and monitoring devices.

SPECIFIC OUTCOME 3

Inspect the charging system for cap lamps, gas testing and monitoring devices.

SPECIFIC OUTCOME 4

Test charging system for cap lamps, gas testing and monitoring devices and prepare for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

120

Carry out a detailed electrical inspection on a drill rig

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115506 | Carry out a detailed electrical inspection on a drill rig | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 5 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to a detailed electrical inspection on a drill rig.

SPECIFIC OUTCOME 2

Prepare to inspect the drill rig.

SPECIFIC OUTCOME 3

Inspect the drill rig.

SPECIFIC OUTCOME 4

Test the drill rig and prepare for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

121

Carry out a detailed electrical inspection on a refrigeration plant

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115532 | Carry out a detailed electrical inspection on a refrigeration plant | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to a detailed electrical inspection on a refrigeration plant.

SPECIFIC OUTCOME 2

Prepare to inspect the refrigeration plant.

SPECIFIC OUTCOME 3

Inspect the refrigeration plant.

SPECIFIC OUTCOME 4

Test the refrigeration plant and prepare for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

122

Carry out a detailed electrical inspection on an air compressor system higher than 5000 cubic metres

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115512 | Carry out a detailed electrical inspection on an air compressor system higher than 5000 cubic metres | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to a detailed electrical inspection on an air compressor system.

SPECIFIC OUTCOME 2

Prepare to inspect the air compressor system.

SPECIFIC OUTCOME 3

Inspect the air compressor system.

SPECIFIC OUTCOME 4

Test the air compressor system and prepare for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

123

Carry out a detailed electrical inspection on an electrical powered mobile hauling machine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115522 | Carry out a detailed electrical inspection on an electrical powered mobile hauling machine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to a detailed electrical inspection.

SPECIFIC OUTCOME 2

Prepare to inspect the machine.

SPECIFIC OUTCOME 3

Inspect the machine.

SPECIFIC OUTCOME 4

Test the machine and prepare for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

124

Carry out a detailed electrical inspection on an electrical powered mobile loading machine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115520 | Carry out a detailed electrical inspection on an electrical powered mobile loading machine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to a detailed electrical inspection.

SPECIFIC OUTCOME 2

Prepare to inspect the machine.

SPECIFIC OUTCOME 3

Inspect the machine.

SPECIFIC OUTCOME 4

Test the machine and prepare for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

125

Carry out a detailed electrical inspection on an emergency power plant

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115525 | Carry out a detailed electrical inspection on an emergency power plant | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to inspecting an emergency power plant.

SPECIFIC OUTCOME 2

Prepare to inspect the emergency power plant.

SPECIFIC OUTCOME 3

Inspect the emergency power plant.

SPECIFIC OUTCOME 4

Test the emergency power plant.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

126

Carry out a detailed electrical inspection on an onboard gas monitoring system

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115528 | Carry out a detailed electrical inspection on an onboard gas monitoring system | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to carrying out a detailed electrical inspection.

SPECIFIC OUTCOME 2

Prepare to carry out a detailed electrical inspection on an onboard gas monitoring system.

SPECIFIC OUTCOME 3

Carry out the detailed electrical inspection on an onboard gas monitoring system.

SPECIFIC OUTCOME 4

Test the onboard gas monitoring system, and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

127

Carry out a detailed electrical inspection on an overhead crane

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115511 | Carry out a detailed electrical inspection on an overhead crane | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 4 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to a detailed electrical inspection on an overhead crane.

SPECIFIC OUTCOME 2

Prepare to inspect the overhead crane.

SPECIFIC OUTCOME 3

Inspect the overhead crane.

SPECIFIC OUTCOME 4

Test the overhead crane and prepare for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

128

Carry out a detailed electrical inspection on an underground coal mining production machine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115546 | Carry out a detailed electrical inspection on an underground coal mining production machine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 5 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to a detailed electrical inspection.

SPECIFIC OUTCOME 2

Prepare to inspect the machine.

SPECIFIC OUTCOME 3

Inspect the machine.

SPECIFIC OUTCOME 4

Test the machine and prepare for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

129

Carry out a detailed inspection on a high voltage transformer and ancillary equipment

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115502 | Carry out a detailed inspection on a high voltage transformer and ancillary equipment | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to carry out a detailed inspection on a high voltage transformer.

SPECIFIC OUTCOME 2

Prepare to inspect a high voltage transformer and ancillary equipment.

SPECIFIC OUTCOME 3

Inspect the high voltage transformer and ancillary equipment.

SPECIFIC OUTCOME 4

Test the high voltage transformer and ancillary equipment and prepare for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

130

Carry out an installation test on low voltage installation

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------------|
| 115787 | Carry out an installation test on low voltage installation | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 5 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the requirements of an installation test on low voltage installation.

SPECIFIC OUTCOME 2

Prepare to test the installation.

SPECIFIC OUTCOME 3

Test the installation.

SPECIFIC OUTCOME 4

Complete the installation testing process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

131

Co-ordinate drilling and blasting operations

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115615 | Co-ordinate drilling and blasting operations | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 26 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Coordinate drill area preparation.

SPECIFIC OUTCOME 2

Monitor compliance to the drilling and blasting plan.

SPECIFIC OUTCOME 3

Evaluate blasting techniques and options.

SPECIFIC OUTCOME 4

Select appropriate blasting technique.

SPECIFIC OUTCOME 5

Monitor and evaluate blasting performance.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

132

Co-ordinate loading and hauling operations in an open pit mine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115694 | Co-ordinate loading and hauling operations in an open pit mine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 10 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Co-ordinate planning and preparation of operations.

SPECIFIC OUTCOME 2

Co-ordinate support equipment operations.

SPECIFIC OUTCOME 3

Monitor loading and hauling operations.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

133

Comply with organisational and work ethics within a surface mining context

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115661 | Comply with organisational and work ethics within a surface mining context | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Protect the interests of workers.

SPECIFIC OUTCOME 2

Ensure correct presentation.

SPECIFIC OUTCOME 3

Maintain good work practices.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

134

Conduct an inspection to evaluate ground conditions in an on-reef development excavation prior to, during and after ledging operations

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115555 | Conduct an inspection to evaluate ground conditions in an on-reef development excavation prior to, during and after ledging operations | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Evaluate ground conditions prior to ledging operations.

SPECIFIC OUTCOME 2

Evaluate ground conditions during and after ledging operations.

SPECIFIC OUTCOME 3

Communicate the results of the inspections.

SPECIFIC OUTCOME 4

Conduct a follow-up on the recommended actions.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

135

Conduct elementary in situ tests of support installation quality

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115551 | Conduct elementary in situ tests of support installation quality | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate basic knowledge of the factors that influence support installation quality.

SPECIFIC OUTCOME 2

Demonstrate understanding of the basic in situ support quality testing methods available.

SPECIFIC OUTCOME 3

Conduct elementary in situ tests of support quality.

SPECIFIC OUTCOME 4

Communicate the results of the tests.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

136

Connect a single phase motor

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|------------------------------|---------------|---------|
| 115548 | Connect a single phase motor | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 4 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the requirements pertaining to connecting single-phase motors.

SPECIFIC OUTCOME 2

Prepare to connect a single-phase motor.

SPECIFIC OUTCOME 3

Connect a single-phase motor.

SPECIFIC OUTCOME 4

Test the single-phase motor and apply housekeeping practices.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

137

Connect and commission a 3-phase transformer

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115541 | Connect and commission a 3-phase transformer | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to connecting and commissioning a 3-phase transformer.

SPECIFIC OUTCOME 2

Prepare to connect and commission a 3-phase transformer.

SPECIFIC OUTCOME 3

Connect the transformer and perform functional tests.

SPECIFIC OUTCOME 4

Commission the transformer and prepare for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

138

Construct a geological cross-section of an undeformed area

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115677 | Construct a geological cross-section of an undeformed area | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate the knowledge and understanding required to construct a geological cross-section.

SPECIFIC OUTCOME 2

Plan and construct a geological cross section.

SPECIFIC OUTCOME 3

Present a geological cross-section.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

139

Demonstrate a basic understanding of the causes of falls of ground

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115750 | Demonstrate a basic understanding of the causes of falls of ground | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate basic understanding of planes that create loose rock.

SPECIFIC OUTCOME 2

Demonstrate the ability to identify potential falls of ground.

SPECIFIC OUTCOME 3

Demonstrate knowledge of appropriate remedial measures.

SPECIFIC OUTCOME 4

Record and report potential falls of ground.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

140

Demonstrate a basic understanding of the concept of time in geology

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115788 | Demonstrate a basic understanding of the concept of time in geology | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 4 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate basic understanding of the units of time used in geology.

SPECIFIC OUTCOME 2

Demonstrate basic understanding of the time required for geological processes.

SPECIFIC OUTCOME 3

Demonstrate basic understanding of the time relationships of geological events in South Africa.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

141

Demonstrate a basic understanding of the effects of drilling and blasting on the surrounding rock mass

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115683 | Demonstrate a basic understanding of the effects of drilling and blasting on the surrounding rock mass | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate basic knowledge of drilling and blasting of the rock mass.

SPECIFIC OUTCOME 2

Demonstrate knowledge of strata control hazards associated with incorrect drilling practices.

SPECIFIC OUTCOME 3

Identify strata control hazards associated with incorrect drilling and assess associated risk.

SPECIFIC OUTCOME 4

Report the hazards to relevant personnel.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

142

Demonstrate an elementary understanding of pillar characteristics, behaviour and function

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115746 | Demonstrate an elementary understanding of pillar characteristics, behaviour and function | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate elementary knowledge of the environments and pillars used in the various environments.

SPECIFIC OUTCOME 2

Demonstrate elementary knowledge of pillar characteristics and behaviour.

SPECIFIC OUTCOME 3

Demonstrate elementary knowledge of methodologies used to design pillars.

SPECIFIC OUTCOME 4

Demonstrate understanding of the effects of incorrect pillars on mine stability.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

143

Demonstrate an elementary understanding of support units, their behaviour and application

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115742 | Demonstrate an elementary understanding of support units, their behaviour and application | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate elementary knowledge of support principles.

SPECIFIC OUTCOME 2

Demonstrate elementary knowledge of support units and their functions.

SPECIFIC OUTCOME 3

Demonstrate elementary understanding of the support unit behaviour.

SPECIFIC OUTCOME 4

Demonstrate elementary understanding of support unit installation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

144

Demonstrate an elementary understanding of the effect of the mining process (drilling, blasting and cleaning) on installed support for different types of working places

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115550 | Demonstrate an elementary understanding of the effect of the mining process (drilling, blasting and cleaning) on installed support for different types of working places | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate basic knowledge of the factors that influence the performance of installed support.

SPECIFIC OUTCOME 2

Demonstrate an understanding of the effect of the drilling process on installed support.

SPECIFIC OUTCOME 3

Demonstrate an understanding of the effects of blasting on installed support.

SPECIFIC OUTCOME 4

Demonstrate an understanding of the effects of cleaning on installed support.

SPECIFIC OUTCOME 5

Demonstrate the ability to record and report damage to support units.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

145

Demonstrate an understanding of basic lubrication principles on underground coal mine equipment

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115634 | Demonstrate an understanding of basic lubrication principles on underground coal mine equipment | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to lubricate components on machines and equipment in a mining context.

SPECIFIC OUTCOME 2

Explain the lubrication method of components on machines and equipment.

SPECIFIC OUTCOME 3

Explain the completion of the lubrication process to components on machines and equipment.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

146

Demonstrate an understanding of coaching individuals within a surface mining work place

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115681 | Demonstrate an understanding of coaching individuals within a surface mining work place | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Provide on-the-job training.

SPECIFIC OUTCOME 2

Provide follow-up and support.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

147

Demonstrate an understanding of excavation stability in a rock pass

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115545 | Demonstrate an understanding of excavation stability in a rock pass | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge of the factors influencing the stability of a rock pass.

SPECIFIC OUTCOME 2

Describe functions of rock pass support system and factors influencing choice of support.

SPECIFIC OUTCOME 3

Demonstrate knowledge to monitor support installation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

148

Demonstrate an understanding of power reticulation system in a surface mine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115623 | Demonstrate an understanding of power reticulation system in a surface mine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 6 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the construction of road and fire breaks.

SPECIFIC OUTCOME 2

Explain the transporting of machines under power lines.

SPECIFIC OUTCOME 3

Explain the stopping of machines under power lines.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

149

Demonstrate basic knowledge and understanding of mine plan reading and transfer recorded information onto a plan

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115633 | Demonstrate basic knowledge and understanding of mine plan reading and transfer recorded information onto a plan | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate an understanding of representing objects and excavations to scale.

SPECIFIC OUTCOME 2

Demonstrate the ability to read a mine plan.

SPECIFIC OUTCOME 3

Demonstrate the ability to orientate a plan in relation to mine workings.

SPECIFIC OUTCOME 4

Demonstrate the ability to transfer observations onto a plan.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

150

Demonstrate elementary knowledge and understanding of geology related to mining

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115704 | Demonstrate elementary knowledge and understanding of geology related to mining | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 1 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate knowledge and understanding of the mine-specific minerals being mined.

SPECIFIC OUTCOME 2

Demonstrate knowledge of the mine-specific rock mass hosting the mineral deposit.

SPECIFIC OUTCOME 3

Demonstrate knowledge of disposition and occurrence applicable to primary mine-specific mineral.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

151

Demonstrate elementary knowledge and understanding of multi-reef / seam environments to achieve excavation stability with support

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115670 | Demonstrate elementary knowledge and understanding of multi-reef / seam environments to achieve excavation stability with support | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate elementary knowledge of multi-reef environments.

SPECIFIC OUTCOME 2

Demonstrate elementary understanding mining implications of multi-reef mining environments.

SPECIFIC OUTCOME 3

Demonstrate understanding of effects of mining on rock mass stability in multi-reef environments.

SPECIFIC OUTCOME 4

Demonstrate elementary understanding of the support requirements for multi-reef mining environments.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

152

Demonstrate elementary knowledge and understanding of precautions required to achieve excavation stability in remnants

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115668 | Demonstrate elementary knowledge and understanding of precautions required to achieve excavation stability in remnants | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate knowledge, understanding of legal requirements and implications in remnant environments.

SPECIFIC OUTCOME 2

Demonstrate knowledge of remnant environments.

SPECIFIC OUTCOME 3

Demonstrate understanding of additional precautions required in remnants.

SPECIFIC OUTCOME 4

Demonstrate understanding of need for recording, implementation, monitoring of remnant precautions.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

153

Demonstrate elementary knowledge and understanding of rockburst prone mining operations to achieve excavation stability with support

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------------|
| 115673 | Demonstrate elementary knowledge and understanding of rockburst prone mining operations to achieve excavation stability with support | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate elementary knowledge of rockbursts.

SPECIFIC OUTCOME 2

Demonstrate elementary knowledge of conditions in rockburst prone environments.

SPECIFIC OUTCOME 3

Demonstrate elementary understanding of the support requirements for rockburst prone areas.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

154

Demonstrate knowledge and basic understanding of the effect of high mining heights on artificial support installation and effectiveness

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115530 | Demonstrate knowledge and basic understanding of the effect of high mining heights on artificial support installation and effectiveness | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Describe the environments associated with high mining heights.

SPECIFIC OUTCOME 2

Demonstrate an understanding of the influence of support height on desired support performance.

SPECIFIC OUTCOME 3

Demonstrate basic knowledge of mode of failure of support units installed in high mining heights.

SPECIFIC OUTCOME 4

Demonstrate basic knowledge of support installation procedures required for high mining heights.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

155

Demonstrate knowledge and understanding of strata control

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115749 | Demonstrate knowledge and understanding of strata control | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge of basic rock mechanics issues.

SPECIFIC OUTCOME 2

Demonstrate basic knowledge of the factors influencing the selection of stope support systems.

SPECIFIC OUTCOME 3

Demonstrate basic knowledge of the influence of drilling and blasting practice on ground control.

SPECIFIC OUTCOME 4

Demonstrate knowledge of the importance of quality assurance measures in strata control.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

156

Demonstrate knowledge for the maintenance and construction of haul, access and service roads

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115622 | Demonstrate knowledge for the maintenance and construction of haul, access and service roads | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 24 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate ability of planning and preparing for maintenance.

SPECIFIC OUTCOME 2

Demonstrate the conducting of maintenance.

SPECIFIC OUTCOME 3

Demonstrate the monitoring and finalising of work procedures.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

157

Demonstrate the ability to ensure that surface mining production targets are reached

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115659 | Demonstrate the ability to ensure that surface mining production targets are reached | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Establish role and performance requirements for each staff member.

SPECIFIC OUTCOME 2

Evaluate staff members against performance requirements.

SPECIFIC OUTCOME 3

Coach staff members to improve performance to reach set targets.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

158

Demonstrate the co-ordination of a conveyor system operations in an underground coal mine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115600 | Demonstrate the co-ordination of a conveyor system operations in an underground coal mine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 4 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate an understanding of the preparation for the starting up phase of a conveyor system.

SPECIFIC OUTCOME 2

Demonstrate an understanding of the operational phase of a conveyor system.

SPECIFIC OUTCOME 3

Demonstrate an understanding of the maintenance phase of a conveyor system.

SPECIFIC OUTCOME 4

Demonstrate an understanding of the shut down procedure of a conveyor system.

SPECIFIC OUTCOME 5

Demonstrate teamwork.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

159

Demonstrate understanding of the effects of brows on excavation stability

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115552 | Demonstrate understanding of the effects of brows on excavation stability | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Describe locations where brows are created and mining practices leading to formation of brows.

SPECIFIC OUTCOME 2

Describe the effects of brows on excavation stability.

SPECIFIC OUTCOME 3

Describe factors influencing the choice of brow support.

SPECIFIC OUTCOME 4

Demonstrate understanding of the hazards associated with installing support under brows.

SPECIFIC OUTCOME 5

Describe the measures employed to manage risks associated with brows.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

160

Describe the effect of mining dimension on excavation stability

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115686 | Describe the effect of mining dimension on excavation stability | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate understanding of relationship between frequency of exposed geological discontinuities.

SPECIFIC OUTCOME 2

Demonstrate an understanding of the stress related effects of different sized excavations.

SPECIFIC OUTCOME 3

Demonstrate an understanding of the effects of the process of excavating on excavation stability.

SPECIFIC OUTCOME 4

Describe the effect of excavation dimension on safe working environment.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

161

Examine and maintain mine safety in a surface mining context

| SAQA US ID | | UNIT STANDARD TITLE | |
|---|--------------------|--|---------------|
| 115671 | | Examine and maintain mine safety in a surface mining context | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 9 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Maintain familiarity with operational and safety activities.

SPECIFIC OUTCOME 2

Examine operations.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

162

Examine and make safe blasted quarry excavations

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115535 | Examine and make safe blasted quarry excavations | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 5 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate an understanding of significant risk of falls of ground in quarries.

SPECIFIC OUTCOME 2

Examine blasted quarries plus their dumps and stockpiles.

SPECIFIC OUTCOME 3

Declare safe blasted quarries and their dumps and stockpiles.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

163

Examine and make safe non-blasted quarry excavations

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115507 | Examine and make safe non-blasted quarry excavations | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate an understanding of significant risk of falls of ground in non-blasted quarries.

SPECIFIC OUTCOME 2

Examine non-blasted quarries, dumps and stockpiles.

SPECIFIC OUTCOME 3

Declare safe non-blasted quarries, dumps and stockpiles.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

164

Fabricate a launder

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---------------------|----------------------------|---------|
| 115740 | Fabricate a launder | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 5 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to fabricate a launder.

SPECIFIC OUTCOME 2

Prepare to fabricate a launder.

SPECIFIC OUTCOME 3

Fabricate a launder.

SPECIFIC OUTCOME 4

Complete the fabricating process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

165

Fabricate a spiral by means of triangulation

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115744 | Fabricate a spiral by means of triangulation | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 5 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to fabricate a spiral by means of triangulation.

SPECIFIC OUTCOME 2

Prepare to fabricate a spiral by means of triangulation.

SPECIFIC OUTCOME 3

Fabricate a spiral by means of triangulation.

SPECIFIC OUTCOME 4

Complete the fabricating process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

166

Fabricate components by means of the parallel line method

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------------|
| 115568 | Fabricate components by means of the parallel line method | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Manufacturing and Assembly | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-MNA-0-SGB MM | Regular | Level 3 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to fabricating components by means of the parallel line method.

SPECIFIC OUTCOME 2

Prepare to fabricate the components by means of the parallel line method.

SPECIFIC OUTCOME 3

Fabricate the components by means of the parallel line method.

SPECIFIC OUTCOME 4

Complete the fabrication process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

167

Fabricate components by means of the radial line method

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115571 | Fabricate components by means of the radial line method | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-MNA-0-SGB MM | Regular | Level 3 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to fabricating components by means of the radial line method.

SPECIFIC OUTCOME 2

Prepare to fabricate the components by means of the radial line method.

SPECIFIC OUTCOME 3

Fabricate the components by means of the radial line method.

SPECIFIC OUTCOME 4

Complete the fabrication process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

168

Fabricate components by means of the triangulation method

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------------|
| 115565 | Fabricate components by means of the triangulation method | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 4 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to fabricating components by means of the triangulation method.

SPECIFIC OUTCOME 2

Prepare to fabricate the components by means of the triangulation method.

SPECIFIC OUTCOME 3

Fabricate the components by means of the triangulation method.

SPECIFIC OUTCOME 4

Complete the fabrication process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

169

Fabricate rolled sections

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---------------------------|----------------------------|---------|
| 115699 | Fabricate rolled sections | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 6 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to fabricating a radial door, liner and flat bar rings.

SPECIFIC OUTCOME 2

Prepare to fabricate a radial door, liner and flat bar rings.

SPECIFIC OUTCOME 3

Fabricate a radial door, liner and flat bar rings.

SPECIFIC OUTCOME 4

Complete the fabrication process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

170

Fault find a high voltage reticulation system

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115599 | Fault find a high voltage reticulation system | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 4 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to fault finding a high voltage reticulation system.

SPECIFIC OUTCOME 2

Prepare to fault find a high voltage reticulation system.

SPECIFIC OUTCOME 3

Fault find the high voltage reticulation system.

SPECIFIC OUTCOME 4

Complete the fault finding process and perform reporting duties.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

171

Fault find and repair a motor starter

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---------------------------------------|---------------|---------|
| 115515 | Fault find and repair a motor starter | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to fault finding and repairs of a motor starter.

SPECIFIC OUTCOME 2

Prepare to fault find and repair the motor starter.

SPECIFIC OUTCOME 3

Fault find and repair the motor starter.

SPECIFIC OUTCOME 4

Prepare and test the starter for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

172

Fault find and repair the electrical system of an electrical powered mobile loading machine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115523 | Fault find and repair the electrical system of an electrical powered mobile loading machine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to fault finding and repairs to electrical systems.

SPECIFIC OUTCOME 2

Prepare to fault find and repair the electrical system.

SPECIFIC OUTCOME 3

Fault find and repair the electrical system.

SPECIFIC OUTCOME 4

Prepare and test the machine for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

173

Fault find and repair the electrical system of an overhead crane

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115534 | Fault find and repair the electrical system of an overhead crane | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to fault finding and repairs to electrical systems of overhead cranes.

SPECIFIC OUTCOME 2

Prepare to fault find and repair the electrical system.

SPECIFIC OUTCOME 3

Fault find and repair the electrical system.

SPECIFIC OUTCOME 4

Prepare and test the overhead crane for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

174

Fault find and repair welding machines

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115614 | Fault find and repair welding machines | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to fault finding and repairs of welding machines.

SPECIFIC OUTCOME 2

Prepare to fault find and repair the welding machine.

SPECIFIC OUTCOME 3

Fault find and repair the welding machine.

SPECIFIC OUTCOME 4

Test the welding machine and prepare for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

175

Fault find and restore electronic control system

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115577 | Fault find and restore electronic control system | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to fault finding and restoring electronic control systems.

SPECIFIC OUTCOME 2

Prepare to fault find and restore the electronic control system.

SPECIFIC OUTCOME 3

Fault find and restore the electronic control system.

SPECIFIC OUTCOME 4

Prepare and test the system for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

176

Grind material by means of a Palla mill

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115664 | Grind material by means of a Palla mill | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 10 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Prepare to over inspect.

SPECIFIC OUTCOME 2

Demonstrate knowledge relating to the grinding of material by means of a Palla mill.

SPECIFIC OUTCOME 3

Prepare to grind material.

SPECIFIC OUTCOME 4

Grind material.

SPECIFIC OUTCOME 5

Complete the duties pertaining to the grinding process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

177

Grind material by means of a pebble mill

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115625 | Grind material by means of a pebble mill | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 10 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge relating to grinding material by means of a pebble mill.

SPECIFIC OUTCOME 2

Prepare to grind material.

SPECIFIC OUTCOME 3

Grind material.

SPECIFIC OUTCOME 4

Complete the duties pertaining to the grinding process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

178

Grind material by means of a tube mill

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115621 | Grind material by means of a tube mill | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 10 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate knowledge relating to grinding material by means of a tube mill.

SPECIFIC OUTCOME 2

Prepare to grind material.

SPECIFIC OUTCOME 3

Grind material.

SPECIFIC OUTCOME 4

Complete the duties pertaining to the grinding process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

179

Identify and evaluate the effect of seismic activity on the rock mass and support units

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115758 | Identify and evaluate the effect of seismic activity on the rock mass and support units | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate basic knowledge of mining induced seismic activity.

SPECIFIC OUTCOME 2

Demonstrate the ability to identify and assess the effect of seismic activity on ground conditions.

SPECIFIC OUTCOME 3

Demonstrate the ability to identify and assess the effect of seismic activity on support units.

SPECIFIC OUTCOME 4

Communicate adverse conditions.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

180

Increase redox potential of hydrochloric acid by means of chlorine gas absorption

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115597 | Increase redox potential of hydrochloric acid by means of chlorine gas absorption | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 8 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate knowledge relating to the absorption of chlorine gas.

SPECIFIC OUTCOME 2

Prepare to absorb chlorine gas.

SPECIFIC OUTCOME 3

Absorb chlorine gas.

SPECIFIC OUTCOME 4

Complete the duties pertaining to the absorption process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

181

Inspect and conduct routine maintenance on an overhead crane

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115693 | Inspect and conduct routine maintenance on an overhead crane | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to inspecting and maintaining an overhead crane.

SPECIFIC OUTCOME 2

Prepare to inspect and maintain the overhead crane.

SPECIFIC OUTCOME 3

Inspect and maintain the overhead crane.

SPECIFIC OUTCOME 4

Complete the inspection and maintenance process and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

182

Inspect and test a pressure vessel

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|------------------------------------|----------------------------|---------|
| 115695 | Inspect and test a pressure vessel | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to inspecting and testing a pressure vessel.

SPECIFIC OUTCOME 2

Prepare to inspect and test a pressure vessel.

SPECIFIC OUTCOME 3

Inspect and test the pressure vessel.

SPECIFIC OUTCOME 4

Complete the inspection process and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

183

Inspect and test an earthing system

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|-------------------------------------|----------------------------|---------|
| 115752 | Inspect and test an earthing system | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to inspecting and testing an earthing system.

SPECIFIC OUTCOME 2

Prepare to inspect and test an earthing system.

SPECIFIC OUTCOME 3

Inspect and test the earthing system.

SPECIFIC OUTCOME 4

Complete the inspection and testing process and prepare for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

184

Install a battery on an uninterruptible power supply

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115544 | Install a battery on an uninterruptible power supply | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to installing a battery on an uninterruptible power supply.

SPECIFIC OUTCOME 2

Prepare to install a battery on an uninterruptible power supply.

SPECIFIC OUTCOME 3

Install the battery.

SPECIFIC OUTCOME 4

Test the uninterruptible power supply and prepare for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

185

Install a traction battery charging system in an underground mine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115572 | Install a traction battery charging system in an underground mine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the requirements pertaining to the installation of a traction battery charging system.

SPECIFIC OUTCOME 2

Prepare to install a traction battery charging system.

SPECIFIC OUTCOME 3

Install a traction battery charging system.

SPECIFIC OUTCOME 4

Test the installation and prepare for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

186

Interpret faults on a PLC system

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|----------------------------------|----------------------------|---------|
| 115513 | Interpret faults on a PLC system | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 4 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to interpreting faults on PLC systems.

SPECIFIC OUTCOME 2

Prepare to interpret faults on a PLC system.

SPECIFIC OUTCOME 3

Interpret faults on the PLC system.

SPECIFIC OUTCOME 4

Complete the process and perform reporting duties.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

187

Join metals horizontal, overhead and vertical by means of arc welding

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------------|
| 115651 | Join metals horizontal, overhead and vertical by means of arc welding | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 13 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to joining metals horizontally, overhead and vertically.

SPECIFIC OUTCOME 2

Prepare to join the metals horizontally, overhead and vertically by means of arc welding.

SPECIFIC OUTCOME 3

Join the metals horizontally, overhead and vertically by means of arc welding.

SPECIFIC OUTCOME 4

Complete the arc welding process and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

188

Layout and fabricate a structure

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|----------------------------------|----------------------------|---------|
| 115697 | Layout and fabricate a structure | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 5 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to layout and fabricate a structure.

SPECIFIC OUTCOME 2

Prepare to layout and fabricate the structure.

SPECIFIC OUTCOME 3

Layout and fabricate the structure.

SPECIFIC OUTCOME 4

Complete the layout and fabrication process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

189

Lift and move loads using an overhead crane

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------------|
| 115562 | Lift and move loads using an overhead crane | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to lifting and moving loads.

SPECIFIC OUTCOME 2

Prepare to lift and move a load by means of a pendant operated overhead crane.

SPECIFIC OUTCOME 3

Lift and move a load by means of a pendant operated overhead crane.

SPECIFIC OUTCOME 4

Make the load available for production purposes.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

190

Load a charge exceeding 10 tons into a rever

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115685 | Load a charge exceeding 10 tons into a rever | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 7 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate knowledge relating to the charging of the furnace.

SPECIFIC OUTCOME 2

Prepare to charge furnace.

SPECIFIC OUTCOME 3

Charge the furnace.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

191

Manage effective employee relationships

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------------|
| 115628 | Manage effective employee relationships | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Gather, analyse, convey and receive information and ideas.

SPECIFIC OUTCOME 2

Develop trust and confidence.

SPECIFIC OUTCOME 3

Manage problems to achieve positive outcomes.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

192

Manage operations to achieve planned outcomes

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115676 | Manage operations to achieve planned outcomes | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Plan resources use to achieve productivity targets.

SPECIFIC OUTCOME 2

Acquire resources to achieve productivity targets.

SPECIFIC OUTCOME 3

Monitor operation performance.

SPECIFIC OUTCOME 4

Monitor resource usage.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

193

Manage the prevention the abuse of earth moving machine tyres

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115784 | Manage the prevention the abuse of earth moving machine tyres | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 24 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Plan and prepare for maintenance.

SPECIFIC OUTCOME 2

Conduct maintenance.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

194

Manually construct an outcrop plan of a geologically simple area from given data

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------------|
| 115691 | Manually construct an outcrop plan of a geologically simple area from given data | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate the knowledge and understanding required to manually construct an outcrop plan.

SPECIFIC OUTCOME 2

Plan and construct an outcrop plan of a geologically simple area.

SPECIFIC OUTCOME 3

Present a geological outcrop plan.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

195

Monitor mine operations in a control room of an underground coal mine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115626 | Monitor mine operations in a control room of an underground coal mine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 8 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare to monitor mine operations.

SPECIFIC OUTCOME 2

Monitor and control processes.

SPECIFIC OUTCOME 3

Record operational information.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

196

Overhaul a blower of a Detroit diesel engine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115729 | Overhaul a blower of a Detroit diesel engine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to overhauling a blower of Detroit diesel engines.

SPECIFIC OUTCOME 2

Prepare to overhaul a blower of Detroit diesel engine.

SPECIFIC OUTCOME 3

Overhaul a blower of a Detroit diesel engine.

SPECIFIC OUTCOME 4

Test the blower and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

197

Overhaul a differential of a self-propelled mobile machine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115783 | Overhaul a differential of a self-propelled mobile machine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 6 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to overhauling a differential of self-propelled mobile machines.

SPECIFIC OUTCOME 2

Prepare to overhaul a differential.

SPECIFIC OUTCOME 3

Overhaul the differential.

SPECIFIC OUTCOME 4

Test the differential and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

198

Overhaul a manual transmission of a self-propelled mobile machine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115776 | Overhaul a manual transmission of a self-propelled mobile machine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 6 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to overhauling a manual transmission of self-propelled mobile machines.

SPECIFIC OUTCOME 2

Prepare to overhaul a manual transmission.

SPECIFIC OUTCOME 3

Overhaul a manual transmission.

SPECIFIC OUTCOME 4

Test the overhauled manual transmission and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

199

Overhaul a steering box of a self-propelled mobile machine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115763 | Overhaul a steering box of a self-propelled mobile machine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to overhauling a steering box of self-propelled mobile machines.

SPECIFIC OUTCOME 2

Prepare to overhaul a steering box.

SPECIFIC OUTCOME 3

Overhaul a steering box.

SPECIFIC OUTCOME 4

Test the overhauled steering box and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

200

Overhaul a sub-assembly of a self-propelled mobile machine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115762 | Overhaul a sub-assembly of a self-propelled mobile machine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 6 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to overhauling a sub-assembly of self-propelled mobile machines.

SPECIFIC OUTCOME 2

Prepare to overhaul a sub-assembly.

SPECIFIC OUTCOME 3

Overhaul a sub-assembly.

SPECIFIC OUTCOME 4

Test the overhauled sub-assembly and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

201

Overhaul a turbo charger of a self-propelled mobile machine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------------|
| 115757 | Overhaul a turbo charger of a self-propelled mobile machine | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to overhauling a turbo charger of self-propelled mobile machines.

SPECIFIC OUTCOME 2

Prepare to overhaul a turbo charger.

SPECIFIC OUTCOME 3

Overhaul a turbo charger.

SPECIFIC OUTCOME 4

Test the overhauled turbo charger and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

202

Perform standard cement/lime industry wet chemical analysis

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115540 | Perform standard cement/lime industry wet chemical analysis | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 17 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the principles related to wet chemical analysis.

SPECIFIC OUTCOME 2

Prepare for analysis.

SPECIFIC OUTCOME 3

Conduct wet chemical analysis.

SPECIFIC OUTCOME 4

Interpret and report analysis results.

SPECIFIC OUTCOME 5

Follow basic health and safety practices during wet chemical analysis.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

203

Process materials in a mobile screening plant

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115503 | Process materials in a mobile screening plant | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 10 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the principles related to the screening of materials.

SPECIFIC OUTCOME 2

Prepare the plant for screening materials.

SPECIFIC OUTCOME 3

Screen material.

SPECIFIC OUTCOME 4

Erect and dismantle a mobile screening plant.

SPECIFIC OUTCOME 5

Follow basic health, safety and environmental practices during screening.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

204

Produce aggregates in a crushing and screening plant

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115559 | Produce aggregates in a crushing and screening plant | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 10 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the principles related to the processing of materials.

SPECIFIC OUTCOME 2

Prepare the plant for producing aggregates.

SPECIFIC OUTCOME 3

Produce materials by means of the crushing and screening plant.

SPECIFIC OUTCOME 4

Conduct operator maintenance of the crushing and screening plant.

SPECIFIC OUTCOME 5

Follow basic health, safety and environmental practices during materials production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

205

Provide leadership in the workplace

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|-------------------------------------|----------------------------|---------|
| 115629 | Provide leadership in the workplace | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Model high standards of management performance.

SPECIFIC OUTCOME 2

Influence individuals and teams positively.

SPECIFIC OUTCOME 3

Make informed decisions.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

206

Pulverise material by means of a vertical ball type pulveriser

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115627 | Pulverise material by means of a vertical ball type pulveriser | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 10 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate knowledge relating to pulverise material by means of a vertical ball type pulveriser.

SPECIFIC OUTCOME 2

Prepare to pulverise material.

SPECIFIC OUTCOME 3

Pulverise material.

SPECIFIC OUTCOME 4

Complete the duties pertaining to the pulverising process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

207

Read surface mining plans

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---------------------------|----------------------------|---------|
| 115666 | Read surface mining plans | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Read mining plans.

SPECIFIC OUTCOME 2

Explain theoretical and legal requirements of mine plans.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

208

Recognise, record and report hazards associated with geological discontinuities

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------------|
| 115667 | Recognise, record and report hazards associated with geological discontinuities | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate basic knowledge of geological discontinuities.

SPECIFIC OUTCOME 2

Demonstrate the ability to identify hazards associated with geological structures.

SPECIFIC OUTCOME 3

Demonstrate the ability to record and communicate the hazards.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

209

Record geotechnical data and draw up a local geotechnical plan

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115549 | Record geotechnical data and draw up a local geotechnical plan | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare for geotechnical data recording.

SPECIFIC OUTCOME 2

Record geotechnical data.

SPECIFIC OUTCOME 3

Prepare for transferring recorded geotechnical data onto a plan.

SPECIFIC OUTCOME 4

Construct a local geotechnical plan.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

210

Repair a detroit diesel allison (DDA) fuel system

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115770 | Repair a detroit diesel allison (DDA) fuel system | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 4 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to repairing a DDA fuel system.

SPECIFIC OUTCOME 2

Prepare to repair a DDA fuel system.

SPECIFIC OUTCOME 3

Repair a DDA fuel system.

SPECIFIC OUTCOME 4

Test the DDA fuel system and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

211

Repair a power assisted steering box of a self-propelled mobile machine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115737 | Repair a power assisted steering box of a self-propelled mobile machine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to repairing a power assisted steering box of self-propelled machines.

SPECIFIC OUTCOME 2

Prepare to repair a power assisted steering box.

SPECIFIC OUTCOME 3

Repair a power assisted steering box.

SPECIFIC OUTCOME 4

Test the power assisted steering box and prepare for operation and/or production



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

212

Repair a power shift transmission

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|-----------------------------------|----------------------------|---------|
| 115748 | Repair a power shift transmission | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 5 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to repairing a power shift transmission.

SPECIFIC OUTCOME 2

Prepare to repair a power shift transmission.

SPECIFIC OUTCOME 3

Repair a power shift transmission.

SPECIFIC OUTCOME 4

Test the power shift transmission and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

213

Repair a pressure timed (PT) fuel system

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115741 | Repair a pressure timed (PT) fuel system | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to repairing a PT fuel system.

SPECIFIC OUTCOME 2

Prepare to repair a PT fuel system.

SPECIFIC OUTCOME 3

Repair a PT fuel system.

SPECIFIC OUTCOME 4

Test the PT fuel system and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

214

Repair an orbital hydraulic steering valve

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115768 | Repair an orbital hydraulic steering valve | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to repairing an orbital hydraulic steering valve.

SPECIFIC OUTCOME 2

Prepare to repair an orbital hydraulic steering valve.

SPECIFIC OUTCOME 3

Repair an orbital hydraulic steering valve.

SPECIFIC OUTCOME 4

Test the orbital hydraulic steering valve and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

215

Repair hydraulic circuits of earth moving equipment

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------------|
| 115721 | Repair hydraulic circuits of earth moving equipment | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 5 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to repairing hydraulic circuits of earth moving equipment.

SPECIFIC OUTCOME 2

Prepare to repair hydraulic circuits.

SPECIFIC OUTCOME 3

Repair the hydraulic circuit.

SPECIFIC OUTCOME 4

Test the hydraulic circuit and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

216

Repair the propel gearbox of a dragline

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115584 | Repair the propel gearbox of a dragline | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 4 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to repairing a propel gearbox of a dragline.

SPECIFIC OUTCOME 2

Prepare to repair the propel gearbox.

SPECIFIC OUTCOME 3

Repair the propel gearbox.

SPECIFIC OUTCOME 4

Test the dragline and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

217

Replace a propel cam on a dragline

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|------------------------------------|----------------------------|---------|
| 115761 | Replace a propel cam on a dragline | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to replacing the propel cam of a dragline.

SPECIFIC OUTCOME 2

Prepare to replace the propel cam of a dragline.

SPECIFIC OUTCOME 3

Replace the propel cam of a dragline.

SPECIFIC OUTCOME 4

Test the propel cam of a dragline and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

218

Replace a sheave wheel in a headgear

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--------------------------------------|----------------------------|---------|
| 115687 | Replace a sheave wheel in a headgear | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to replacing a sheave wheel in a headgear.

SPECIFIC OUTCOME 2

Prepare to remove the sheave wheel.

SPECIFIC OUTCOME 3

Replace the sheave wheel.

SPECIFIC OUTCOME 4

Test the sheave wheel and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

219

Replace auto-electrical wiring on a self-propelled mobile machine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------------|
| 115636 | Replace auto-electrical wiring on a self-propelled mobile machine | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to replacing auto-electrical wiring on self-propelled mobile machines.

SPECIFIC OUTCOME 2

Prepare to replace the auto-electrical wiring.

SPECIFIC OUTCOME 3

Replace the auto-electrical wiring.

SPECIFIC OUTCOME 4

Test the self-propelled mobile machine and prepare for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

220

Replace mechanical components on the lubrication system of a dragline

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115588 | Replace mechanical components on the lubrication system of a dragline | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 4 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain factors critical to replacing mechanical components on the lubrication system of a dragline.

SPECIFIC OUTCOME 2

Prepare to replace mechanical components on the lubrication system.

SPECIFIC OUTCOME 3

Replace mechanical components on the lubrication system.

SPECIFIC OUTCOME 4

Test the lubrication system and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

221

Replace suspension and steering components on light vehicles

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115582 | Replace suspension and steering components on light vehicles | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to replacing suspension and steering components on light vehicles.

SPECIFIC OUTCOME 2

Prepare to replace the suspension and steering components on a light vehicle.

SPECIFIC OUTCOME 3

Replace the suspension and steering components on a light vehicle.

SPECIFIC OUTCOME 4

Test the suspension and steering, and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

222

Replace suspension components of self propelled heavy machines

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115738 | Replace suspension components of self propelled heavy machines | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to replacing suspension components of self-propelled mobile machines.

SPECIFIC OUTCOME 2

Prepare to replace suspension components.

SPECIFIC OUTCOME 3

Replace suspension components.

SPECIFIC OUTCOME 4

Test the suspension components and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

223

Replace the cylinder head gasket of an internal combustion engine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------------|
| 115725 | Replace the cylinder head gasket of an internal combustion engine | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 4 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to replacing cylinder head gaskets on an internal combustion engine.

SPECIFIC OUTCOME 2

Prepare to replace the cylinder head gasket.

SPECIFIC OUTCOME 3

Replace the cylinder head gasket.

SPECIFIC OUTCOME 4

Test the engine and prepare for operation and/or production.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

224

Supervise the relocation of machines

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--------------------------------------|---------------|---------|
| 115650 | Supervise the relocation of machines | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Plan to relocate machines.

SPECIFIC OUTCOME 2

Supervise relocation of machines.

SPECIFIC OUTCOME 3

Perform post relocation activities.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

225

Support drilling operations in a surface mining context

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115643 | Support drilling operations in a surface mining context | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 11 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Conduct sampling.

SPECIFIC OUTCOME 2

Conduct cleaning of machine and equipment.

SPECIFIC OUTCOME 3

Perform basic calculations as required to undertake work activities.

SPECIFIC OUTCOME 4

Assist with relocation of drill rig.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

226

Terminate and connect a high voltage cable end

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115620 | Terminate and connect a high voltage cable end | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 2 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to terminating and connecting high voltage cable ends.

SPECIFIC OUTCOME 2

Prepare to terminate and connect the cable end.

SPECIFIC OUTCOME 3

Terminate and connect the cable end.

SPECIFIC OUTCOME 4

Prepare and test the equipment for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

227

Test and locate a fault on a disconnected trailing cable

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115632 | Test and locate a fault on a disconnected trailing cable | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to testing and locating faults on a disconnected trailing cable.

SPECIFIC OUTCOME 2

Prepare to test and locate the fault.

SPECIFIC OUTCOME 3

Test the cable and locate fault.

SPECIFIC OUTCOME 4

Complete the process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

228

Use and care for electrical measuring, testing and recording instruments

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115743 | Use and care for electrical measuring, testing and recording instruments | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to using and caring for specialised electrical measuring and testing.

SPECIFIC OUTCOME 2

Prepare to use specialised electrical measuring, testing and recording instruments.

SPECIFIC OUTCOME 3

Use specialised electrical measuring, testing and recording instruments.

SPECIFIC OUTCOME 4

Care for specialised electrical measuring, testing and recording instruments.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

229

Use and care for high voltage electrical test instruments

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115644 | Use and care for high voltage electrical test instruments | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Explain the factors critical to using and caring for high voltage electrical test instruments.

SPECIFIC OUTCOME 2

Prepare to use and care for high voltage electrical test instruments.

SPECIFIC OUTCOME 3

Use high voltage electrical test instruments.

SPECIFIC OUTCOME 4

Care for high voltage electrical test instruments and prepare for operation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

230

Work in mineral product silos and bins for operational or maintenance purposes

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115786 | Work in mineral product silos and bins for operational or maintenance purposes | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 3 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate an understanding of working in mineral product bins and silos.

SPECIFIC OUTCOME 2

Prepare to work in bins and silos.

SPECIFIC OUTCOME 3

Work in mineral product bins and silos.

SPECIFIC OUTCOME 4

Finalise working in mineral product bins and silos.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

231

Construct and interpret a geological cross-section in a familiar area

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115684 | Construct and interpret a geological cross-section in a familiar area | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 4 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge and understanding required to construct, interpret a geological cross-section.

SPECIFIC OUTCOME 2

Plan to construct a geological cross section.

SPECIFIC OUTCOME 3

Construct a geological cross section.

SPECIFIC OUTCOME 4

Interpret a geological cross-section.

SPECIFIC OUTCOME 5

Compile and present a geological cross-section and relevant reports.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

232

Demonstrate an understanding of igneous rocks

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115705 | Demonstrate an understanding of igneous rocks | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 4 | 6 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate understanding of the processes that result in the derivation of igneous rocks.

SPECIFIC OUTCOME 2

Demonstrate understanding of the principle characteristics of fine grained igneous rocks.

SPECIFIC OUTCOME 3

Demonstrate understanding of the principle characteristics of medium grained igneous rocks.

SPECIFIC OUTCOME 4

Demonstrate understanding of the principle characteristics of coarse grained igneous rocks.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

233

Demonstrate an understanding of legislation and compliance in the Mining and Minerals Sector

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115663 | Demonstrate an understanding of legislation and compliance in the Mining and Minerals Sector | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 4 | 9 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge of the Mine Health and Safety Act.

SPECIFIC OUTCOME 2

Demonstrate knowledge of the Explosives Act.

SPECIFIC OUTCOME 3

Demonstrate knowledge of the Environmental Conservation Act.

SPECIFIC OUTCOME 4

Demonstrate knowledge of mandatory Codes of Practice.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

234

Demonstrate an understanding of metamorphic rocks

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115708 | Demonstrate an understanding of metamorphic rocks | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 4 | 6 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate understanding of the processes that result in the derivation of metamorphic rocks.

SPECIFIC OUTCOME 2

Demonstrate understanding of the principle characteristics of low grade metamorphic rocks rocks.

SPECIFIC OUTCOME 3

Demonstrate understanding of the principle characteristics of medium grade metamorphic rocks.

SPECIFIC OUTCOME 4

Demonstrate understanding of the principle characteristics of high grade metamorphic rocks.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

235

Demonstrate an understanding of quality management principles and processes with in a surface mining work place

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115619 | Demonstrate an understanding of quality management principles and processes with in a surface mining work place | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 4 | 11 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Interpret quality principles.

SPECIFIC OUTCOME 2

Apply quality principles.

SPECIFIC OUTCOME 3

Report on workplace quality performance.

SPECIFIC OUTCOME 4

Participate in quality improvement.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

236

Demonstrate an understanding of sedimentary rocks

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115701 | Demonstrate an understanding of sedimentary rocks | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 4 | 6 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate understanding of the processes that result in the derivation of sedimentary rocks.

SPECIFIC OUTCOME 2

Demonstrate understanding of the principle characteristics of clastic sedimentary rocks.

SPECIFIC OUTCOME 3

Demonstrate understanding of the principle characteristics of chemical sedimentary rocks.

SPECIFIC OUTCOME 4

Demonstrate understanding of the principle characteristics of biological sedimentary rocks.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

237

Demonstrate an understanding of strata control systems

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115594 | Demonstrate an understanding of strata control systems | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 4 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate an understanding of primitive and induced stresses.

SPECIFIC OUTCOME 2

Demonstrate an understanding of the principles of roof support.

SPECIFIC OUTCOME 3

Demonstrate an understanding of relevant support categories.

SPECIFIC OUTCOME 4

Demonstrate an understanding of the principles of various support elements.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

238

Demonstrate an understanding of ventilation systems in an underground coal mine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115608 | Demonstrate an understanding of ventilation systems in an underground coal mine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 4 | 10 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

State the legal requirements regarding ventilation.

SPECIFIC OUTCOME 2

Explain the system of ventilation in mine workings.

SPECIFIC OUTCOME 3

Measure and calculate air quantities.

SPECIFIC OUTCOME 4

Conduct section ventilation survey.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

241

Demonstrate elementary knowledge and understanding of the interaction between rock strength, stress, and fracturing

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115739 | Demonstrate elementary knowledge and understanding of the interaction between rock strength, stress, and fracturing | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 4 | 3 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate elementary knowledge and understanding of the properties and strength of rock.

SPECIFIC OUTCOME 2

Demonstrate an elementary knowledge and understanding of stress in the mining environment.

SPECIFIC OUTCOME 3

Demonstrate an elementary knowledge and understanding of stress related fracturing.

SPECIFIC OUTCOME 4

Demonstrate an understanding of the effects of the relationship between rock strength and stress.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

242

Demonstrate the coordination of loading operations in an underground coal mine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115585 | Demonstrate the coordination of loading operations in an underground coal mine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 4 | 5 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate an understanding of the preparation to load coal phase.

SPECIFIC OUTCOME 2

Demonstrate an understanding of the coal loading phase.

SPECIFIC OUTCOME 3

Demonstrate an understanding of the shut down procedure of the loading operation.

SPECIFIC OUTCOME 4

Demonstrate teamwork in loading coal.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

243

Demonstrate the coordination of transporting operations in an underground coal mine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115586 | Demonstrate the coordination of transporting operations in an underground coal mine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 4 | 5 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate an understanding of the preparation for transport.

SPECIFIC OUTCOME 2

Demonstrate an understanding of the transport operation.

SPECIFIC OUTCOME 3

Demonstrate an understanding of the shut down procedure of the transport operation.

SPECIFIC OUTCOME 4

Demonstrate teamwork.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

244

Evaluate improvements to the quality of polished diamond gemstones by means of colour improvement

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115774 | Evaluate improvements to the quality of polished diamond gemstones by means of colour improvement | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 4 | 15 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Describe the methods of improving polished diamond gemstones by colour improvement.

SPECIFIC OUTCOME 2

Estimate the potential added value of improvement.

SPECIFIC OUTCOME 3

Explain the risks associated with improvement activities.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

245

Evaluate improvements to the quality of polished diamond gemstones by means of deep boiling

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115777 | Evaluate improvements to the quality of polished diamond gemstones by means of deep boiling | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 4 | 15 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Describe the methods of improving polished diamond gemstones by deep boiling.

SPECIFIC OUTCOME 2

Estimate the potential added value of improvement.

SPECIFIC OUTCOME 3

Explain the risks associated with improvement activities.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

246

Evaluate improvements to the quality of polished diamond gemstones by means of laser drilling

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115780 | Evaluate improvements to the quality of polished diamond gemstones by means of laser drilling | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 4 | 39 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Describe the methods of improving polished diamond gemstones by laser drilling.

SPECIFIC OUTCOME 2

Estimate the potential added value of improvement.

SPECIFIC OUTCOME 3

Explain the risks associated with improvement activities.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

247

Evaluate improvements to the quality of polished diamond gemstones by means of minimising impurities

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115775 | Evaluate improvements to the quality of polished diamond gemstones by means of minimising impurities | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 4 | 39 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Describe the methods of improving polished diamond gemstones by minimising impurities.

SPECIFIC OUTCOME 2

Estimate the potential added value of improvement.

SPECIFIC OUTCOME 3

Explain the risks associated with improvement activities.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

248

Evaluate improvements to the quality of polished diamond gemstones by means of repairs

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115773 | Evaluate improvements to the quality of polished diamond gemstones by means of repairs | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 4 | 39 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Describe the methods of improving polished diamond gemstones by repairs.

SPECIFIC OUTCOME 2

Estimate the potential added value of improvement.

SPECIFIC OUTCOME 3

Explain the risks associated with improvement activities.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

249

Evaluate the effect of face configuration on stress induced fracture patterns and orientations

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------------|
| 115751 | Evaluate the effect of face configuration on stress induced fracture patterns and orientations | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 4 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Evaluate the mechanisms causing stress induced fracturing.

SPECIFIC OUTCOME 2

Demonstrate an understanding of the influence of face shapes.

SPECIFIC OUTCOME 3

Demonstrate knowledge of the effects of stress fracturing on stope stability.

SPECIFIC OUTCOME 4

Evaluate the changes that can be made in face shapes to improve stope stability.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

250

Identify and evaluate signs of deteriorating ground conditions during the mining process

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115756 | Identify and evaluate signs of deteriorating ground conditions during the mining process | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 4 | 4 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate knowledge and understanding of the reasons for deteriorating ground conditions.

SPECIFIC OUTCOME 2

Identify and evaluate ground conditions during mining operations.

SPECIFIC OUTCOME 3

Communicate the results of the evaluation.

SPECIFIC OUTCOME 4

Conduct a follow-up on the recommended actions.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

251

Monitor mine operations in a control room

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115648 | Monitor mine operations in a control room | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 4 | 18 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare to monitor mine operations.

SPECIFIC OUTCOME 2

Communicate using communications technology.

SPECIFIC OUTCOME 3

Input, store and retrieve data.

SPECIFIC OUTCOME 4

Monitor mine operations.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

252

Over inspect emergency escape drill strategies in an underground coal mine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115581 | Over inspect emergency escape drill strategies in an underground coal mine | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 4 | 3 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Prepare to over inspect.

SPECIFIC OUTCOME 2

Conduct over inspection.

SPECIFIC OUTCOME 3

Demonstrate teamwork.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

253

Over inspect operations in a blasting section in an underground coal mine

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------------|
| 115583 | Over inspect operations in a blasting section in an underground coal mine | | |
| SGB NAME | | ABET BAND | PROVIDER NAME |
| SGB Mining and Minerals | | Undefined | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 4 | 6 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare to over inspect operations in a blasting section.

SPECIFIC OUTCOME 2

Over inspect operations in a blasting section.

SPECIFIC OUTCOME 3

Demonstrate teamwork.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

254

Oversee a jig operation process in a metallurgical plant

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115578 | Oversee a jig operation process in a metallurgical plant | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 4 | 25 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate knowledge relating to the overseeing of a jig concentration process.

SPECIFIC OUTCOME 2

Demonstrate knowledge relating to the operation of a jig concentration process.

SPECIFIC OUTCOME 3

Oversee a jig concentration process.

SPECIFIC OUTCOME 4

Complete the duties pertaining to the overseeing of a jig concentration process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

255

Oversee the process of diamond recovery from dense medium separation concentrates

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115609 | Oversee the process of diamond recovery from dense medium separation concentrates | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 4 | 12 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate knowledge relating to the overseeing of the diamond recovery process.

SPECIFIC OUTCOME 2

Demonstrate knowledge relating to the diamond recovery process.

SPECIFIC OUTCOME 3

Oversee the diamond recovery process.

SPECIFIC OUTCOME 4

Complete the duties pertaining to the overseeing of the diamond recovery process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

256

Handle explosives in a surface mining environment

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115514 | Handle explosives in a surface mining environment | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 5 | 5 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate a basic understanding of explosives handling, transport and storage.

SPECIFIC OUTCOME 2

Transport and store explosives and accessories.

SPECIFIC OUTCOME 3

Assist personnel responsible for charging and firing blastholes.

SPECIFIC OUTCOME 4

Adhere to safety and health requirements.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

257

Investigate problems and recommend solutions for determinations relating to instrumental techniques used in analytical laboratories

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|--------------------------------|---------|
| 115516 | Investigate problems and recommend solutions for determinations relating to instrumental techniques used in analytical laboratories | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Engineering and Related Design | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-ENG-0-SGB MM | Regular | Level 5 | 30 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge relating to instrumental techniques.

SPECIFIC OUTCOME 2

Investigate problems relating to the instrumental technique.

SPECIFIC OUTCOME 3

Analyse non-routine samples by instrumental techniques.

SPECIFIC OUTCOME 4

Develop a new method or modify an existing method.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

258

Investigate problems and recommended solutions for each stage in the fire assay process

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115509 | Investigate problems and recommended solutions for each stage in the fire assay process | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 5 | 20 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate knowledge relating to the fire assay process.

SPECIFIC OUTCOME 2

Investigate problems relating to the sample preparation process.

SPECIFIC OUTCOME 3

Investigate problems relating to the fluxing process.

SPECIFIC OUTCOME 4

Investigate problems relating to the fusion process.

SPECIFIC OUTCOME 5

Investigate problems relating to the low temperature cupellation process.

SPECIFIC OUTCOME 6

Investigate problems relating to the final step in the fire assay process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

259

Log and sample faces to obtain geological information for quality control purposes in a kimberlite

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115723 | Log and sample faces to obtain geological information for quality control purposes in a kimberlite | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 5 | 6 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate the knowledge required to log and sample faces in kimberlite mines.

SPECIFIC OUTCOME 2

Prepare to log and sample the face.

SPECIFIC OUTCOME 3

Log the face to be sampled.

SPECIFIC OUTCOME 4

Sample the logged face.

SPECIFIC OUTCOME 5

Conduct post logging and sampling activities, compile and present reports.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

260

Log borehole core to obtain geological information on the lithologies in a kimberlite deposit

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|---------------|---------|
| 115717 | Log borehole core to obtain geological information on the lithologies in a kimberlite deposit | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 5 | 7 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate the knowledge required to log borehole core in a known kimberlite.

SPECIFIC OUTCOME 2

Prepare to log borehole core.

SPECIFIC OUTCOME 3

Log borehole core.

SPECIFIC OUTCOME 4

Conduct post-logging activities and compile and present reports.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

261

Log borehole core to obtain geological information on the lithologies in a massive sulphide deposit

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115726 | Log borehole core to obtain geological information on the lithologies in a massive sulphide deposit | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 5 | 7 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate knowledge to log borehole core in massive sulphide deposit in known environment.

SPECIFIC OUTCOME 2

Prepare to log borehole core.

SPECIFIC OUTCOME 3

Log borehole core.

SPECIFIC OUTCOME 4

Conduct post-logging activities and compile and present reports.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

262

Log borehole core to obtain geological information on the lithologies in a porphyry copper deposit

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115728 | Log borehole core to obtain geological information on the lithologies in a porphyry copper deposit | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 5 | 7 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate knowledge to log borehole core in porphyry copper deposit in known environment.

SPECIFIC OUTCOME 2

Prepare to log borehole core.

SPECIFIC OUTCOME 3

Log borehole core.

SPECIFIC OUTCOME 4

Conduct post-logging activities and compile and present reports.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

263

Log borehole core to obtain geological information on the lithologies in an alkaline magmatic deposit

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115710 | Log borehole core to obtain geological information on the lithologies in an alkaline magmatic deposit | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 5 | 7 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate the knowledge required to log borehole core in a known alkaline magmatic deposit.

SPECIFIC OUTCOME 2

Prepare to log borehole core.

SPECIFIC OUTCOME 3

Log borehole core.

SPECIFIC OUTCOME 4

Conduct post-logging activities and compile and present reports.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

264

Log borehole core to obtain geological information on the strata in a heavy mineral placer deposit

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115731 | Log borehole core to obtain geological information on the strata in a heavy mineral placer deposit | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 5 | 7 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate knowledge to log borehole core in heavy mineral placer deposit in known environment.

SPECIFIC OUTCOME 2

Prepare to log borehole core.

SPECIFIC OUTCOME 3

Log borehole core.

SPECIFIC OUTCOME 4

Conduct post-logging activities and compile and present reports.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

265

Log borehole core to obtain geological information on the strata in a lode deposit

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|---------------|---------|
| 115709 | Log borehole core to obtain geological information on the strata in a lode deposit | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | SUBFIELD DESCRIPTION | | |
| Manufacturing, Engineering and Technology | Fabrication and Extraction | | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 5 | 7 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate the knowledge required to log borehole core in a lode deposit.

SPECIFIC OUTCOME 2

Prepare to log borehole core.

SPECIFIC OUTCOME 3

Log borehole core.

SPECIFIC OUTCOME 4

Conduct post-logging activities and compile and present reports.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

266

Log borehole core to obtain geological information in a lode deposit in problematic and unfamiliar geological environments

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115715 | Log borehole core to obtain geological information in a lode deposit in problematic and unfamiliar geological environments | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 6 | 10 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate the knowledge required to log borehole core in problematic and unfamiliar lode deposits.

SPECIFIC OUTCOME 2

Prepare to log borehole core.

SPECIFIC OUTCOME 3

Log borehole core.

SPECIFIC OUTCOME 4

Conduct post-logging activities and compile and present reports.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

267

Log borehole core to obtain geological information in an alkaline magmatic deposit in problematic and unfamiliar geological environments

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115714 | Log borehole core to obtain geological information in an alkaline magmatic deposit in problematic and unfamiliar geological environments | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 6 | 10 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge required to log borehole core in problematic alkaline magmatic deposits.

SPECIFIC OUTCOME 2

Prepare to log borehole core.

SPECIFIC OUTCOME 3

Log borehole core.

SPECIFIC OUTCOME 4

Conduct post-logging activities and compile and present reports.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

268

Log borehole core to obtain geological information of a heavy mineral placer deposit in problematic and unfamiliar geological environments

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|--|----------------------------|---------|
| 115736 | Log borehole core to obtain geological information of a heavy mineral placer deposit in problematic and unfamiliar geological environments | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 6 | 10 |

Specific Outcomes:**SPECIFIC OUTCOME 1**

Demonstrate knowledge to log borehole core in problematic, unfamiliar heavy mineral placer deposits.

SPECIFIC OUTCOME 2

Prepare to log borehole core.

SPECIFIC OUTCOME 3

Log borehole core.

SPECIFIC OUTCOME 4

Conduct post-logging activities, compile and present reports.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

269

Map and sample faces to obtain information on the characteristics of the mineralized zone in a lode deposit

| SAQA US ID | UNIT STANDARD TITLE | | |
|---|---|----------------------------|---------|
| 115722 | Map and sample faces to obtain information on the characteristics of the mineralized zone in a lode deposit | | |
| SGB NAME | ABET BAND | PROVIDER NAME | |
| SGB Mining and Minerals | Undefined | | |
| FIELD DESCRIPTION | | SUBFIELD DESCRIPTION | |
| Manufacturing, Engineering and Technology | | Fabrication and Extraction | |
| UNIT STANDARD CODE | UNIT STANDARD TYPE | NQF LEVEL | CREDITS |
| MET-FBE-0-SGB MM | Regular | Level 6 | 12 |

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate the knowledge required to map and sample a mineralised face.

SPECIFIC OUTCOME 2

Prepare to map and sample the face.

SPECIFIC OUTCOME 3

Map the face.

SPECIFIC OUTCOME 4

Sample the face.

SPECIFIC OUTCOME 5

Conduct post-mapping and sampling activities and compile and present reports.

Printed by and obtainable from the Government Printer, Bosman Street, Private Bag X85, Pretoria, 0001
 Publications: Tel: (012) 334-4508, 334-4509, 334-4510
 Advertisements: Tel: (012) 334-4673, 334-4674, 334-4504
 Subscriptions: Tel: (012) 334-4735, 334-4736, 334-4737
 Cape Town Branch: Tel: (021) 465-7531

Gedruk deur en verkrygbaar by die Staatsdrukker, Bosmanstraat, Privaatsak X85, Pretoria, 0001
 Publikasies: Tel: (012) 334-4508, 334-4509, 334-4510
 Advertensies: Tel: (012) 334-4673, 334-4674, 334-4504
 Subskripsies: Tel: (012) 334-4735, 334-4736, 334-4737
 Kaapstad-tak: Tel: (021) 465-7531