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

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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.saga.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 Mphuthing

Postnet Suite 248

Private Bag X06

Waterkloof

0145

or faxed to 012 – 431-5144

e-mail: mmphuthing@saga.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.



Established in terms of Act 58 of 1995

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.



Established in terms of Act 58 of 1995

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.



Established in terms of Act 58 of 1995

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

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

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.saga.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@saga.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.



Established in terms of Act 58 of 1995

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.saqqa.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

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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.



Established in terms of Act 58 of 1995

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.



Established in terms of Act 58 of 1995

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.



Established in terms of Act 58 of 1995

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.



Established in terms of Act 58 of 1995

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.



Established in terms of Act 58 of 1995

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 comprssor 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.



Established in terms of Act 58 of 1995

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.



Established in terms of Act 58 of 1995

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.



Established in terms of Act 58 of 1995

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.



Established in terms of Act 58 of 1995

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.



Established in terms of Act 58 of 1995

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 presuure 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.



Established in terms of Act 58 of 1995

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.



Established in terms of Act 58 of 1995

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.



Established in terms of Act 58 of 1995

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.



Established in terms of Act 58 of 1995

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.



Established in terms of Act 58 of 1995

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.



Established in terms of Act 58 of 1995

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.

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