

Government Gazette Staatskoerant

REPUBLIC OF SOUTH AFRICA REPUBLIEK VAN SUID-AFRIKA

Vol. 469

Pretoria, 9 July 2004

No. 26541



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

CONTENTS • INHOUD

No.

Page Gazette No. No.

GOVERNMENT NOTICES

South African Qualifications Authority

Government Notices

808	National Standards Bodies Regulations: Standards Generating Body (SGB) for South African Sign Language registered by NSB 04, Communication Studies and Language	3	26541
809	do.: Standards Generating Body (SGB) for GET/FET Communication Studies and Language	17	26541
810	Standards Generating Bodies: National Standards Body 08, Law, Military Science and Security	22	26541
811	National Standards Bodies Regulations: Standards Generating Body (SGB) for Mining and Minerals registered by NSB 06, Manufacturing, Engineering and Technology	28	26541

GOVERNMENT NOTICES

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

No. 808

9 June 2004



SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)

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

South African Sign Language

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

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

Comment on the unit standards should reach SAQA at the address **below and no later than 9 August 2004**. All correspondence should be marked **Standards Setting – SGB for 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: mmphuting@saga.co.za

JOE SAMUELS

DIRECTOR: STANDARDS SETTING AND DEVELOPMENT



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 BANK	PROVIDER NAME					
SGB SA Sign Language and Sign Lang Interpreting		Undefined							
FIELD DESC	RIPTION		SUBFIELL	DESCRIPTION					
Communication	on Studies and L	anguage	Language						
UNIT STAND	ARD CODE	UNIT STA	ANDARD 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.



UNIT STANDARD:

2

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

SAQA US ID	UNIT STAND	NIT STANDARD TITLE								
115804	Discuss a pra	Sign Language								
SGB NAME			ABET BAN							
SGB SA Sign Language and Sign Lang Interpreting			Undefined	The transfer and the tr						
FIELD DESCI	RIPTION		SUBFIELD	DESCRIPTION						
Communicatio	n Studies and L	anguage	Language							
UNIT STANDARD CODE UNIT STAN		NDARD TYPE	NQF LEVEL	CREDITS						
COM-LAN-0-S	GB 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.



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 Africa Sign Language							
SGB NAME			ABET BAND	PROVIDER NAME				
SGB SA Sign Language and Sign Lang Interpreting			Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Communication Studies and Language			Language					
UNIT STANDARD CODE UNIT STA		NDARD 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.



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 STAND	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 BAN	PROVIDER NAM	'E				
SGB SA Sign Language and Sign Lang Interpreting			Undefined						
FIELD DESCR	RIPTION		SUBFIELL	DESCRIPTION					
Communicatio	n Studies and L	anguage	Language						
UNIT STANDARD CODE UNIT STA		NDARD TYPE	NQF LEVEL	CREDITS					
COM-LAN-0-SGB SASLI Regular		HAM.	Level 5	6					

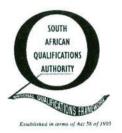
Specific Outcomes:

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.



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

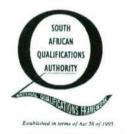
Specific Outcomes:

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.



UNIT STANDARD:

6

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

UNIT STANDARD TITLE								
Paraphrase and summarise a signed presentation on an unfamiliar topic using South African Sign Language								
		ABET BAN	D PROV	IDER NAME				
SGB SA Sign Language and Sign Lang Interpreting				-				
RIPTION		SUBFIELD DESCRIPTION						
Communication Studies and Language			Language					
UNIT STANDARD CODE UNIT STAI		NDARD TYPE	NQF LEV	/EL	CREDITS			
			Level 5		5			
	Paraphrase and Sign Language and SIPTION In Studies and LARD CODE	Paraphrase and summarise Sign Language Language and Sign Lang RIPTION In Studies and Language ARD CODE UNIT STA	Paraphrase and summarise a signed present Sign Language ABET BAN Language and Sign Lang Undefined RIPTION In Studies and Language ARD CODE UNIT STANDARD TYPE	Paraphrase and summarise a signed presentation on an Sign Language ABET BAND PROVIDED IN THE	Paraphrase and summarise a signed presentation on an unfamiliar topic Sign Language ABET BAND PROVIDER NAME Language and Sign Lang Undefined SUBFIELD DESCRIPTION In Studies and Language ARD CODE UNIT STANDARD TYPE NQF LEVEL			

Specific Outcomes:

SPECIFIC OUTCOME 1

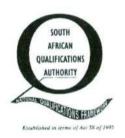
Ask questions on a signed monologue and a signed text on an unfamiliar topic.

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.



UNIT STANDARD:

9

Debate an issue using South African Sign Language

SAQA US ID							
115812	Debate an issue using South African Sign Language						
SGB NAME SGB SA Sign Language and Sign Lang Interpreting			ABET BAN	PROVIDER NAME	4,000		
			Undefined				
FIELD DESC	RIPTION		SUBFIEL				
Communication	on Studies and L	anguage	Language				
UNIT STAND	ARD CODE	UNIT STA	NDARD TYPE	NQF LEVEL	CREDITS		
COM-LAN-0-SGB SASLI Regular		Regular		Level 6	3		

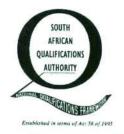
Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare for a debate.

SPECIFIC OUTCOME 2

Participate in a debate, using SASL.



UNIT STANDARD:

6

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

SAQA US ID	UNIT STANDARD TITLE Paraphrase and summarise a signed presentation on an unfamiliar topic using South African Sign Language								
115800									
SGB NAME			ABET BAN	D PROVIDER N	VAME				
SGB SA Sign Language and Sign Lang Interpreting		Undefined							
FIELD DESCR	RIPTION		SUBFIELD DESCRIPTION						
Communication Studies and Language			Language						
UNIT STANDARD CODE UNIT STA COM-LAN-0-SGB SASLI Regular		NDARD TYPE	NQF LEVEL	CREDITS					
			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.

1



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 BANK	PROVIDER NAME				
SGB SA Sign Language and Sign Lang Interpreting			Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Communication Studies and Language			Language					
UNIT STANDARD CODE UNIT STA		NDARD 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.



UNIT STANDARD:

8

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

SAQA US ID	UNIT STAND	ARD TITLE						
115808	Recount a sig	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 DESC	RIPTION		SUBFIELI	D DESCRIPTION				
Communication	on Studies and L	anguage	Language	The second of the second of the second of				
UNIT STAND	ARD CODE	UNIT STA	NDARD TYPE	NQF LEVEL	CREDITS			
COM-LAN-0-S	GB 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.



UNIT STANDARD:

9

Debate an issue using South African Sign Language

SAQA US ID	The second secon	UNIT STANDARD TITLE						
115812	Debate an issue using South African Sign Language							
SGB NAME SGB SA Sign Language and Sign Lang Interpreting			ABET BAN	ABET BAND PROVIDER NAME				
			Undefined					
FIELD DESC	RIPTION		SUBFIEL	D DE	SCRIPTION			
Communication	on Studies and L	.anguage	Language)				
UNIT STANDARD CODE UNIT STANDA			NDARD TYPE	NO	QF LEVEL	CREDITS		
	COM-LAN-0-SGB SASLI Regular			Le	vel 6	3		

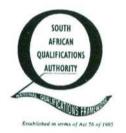
Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare for a debate.

SPECIFIC OUTCOME 2

Participate in a debate, using SASL.



UNIT STANDARD:

10

Demonstrate knowledge of the structure of South African Sign Language

SAQA US ID	UNIT STANDARD TITLE							
115802	Demonstrate I	Demonstrate knowledge of the structure of South African Sign Language						
SGB NAME			ABET BAN					
SGB SA Sign Language and Sign Lang Interpreting			Undefined					
FIELD DESCR	RIPTION		SUBFIELD	DESCRIPTION				
Communicatio	n Studies and L	anguage	Language					
UNIT STANDA	ARD CODE	UNIT STAN	NDARD 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.



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 BAN	PROVI	PROVIDER NAME		
SGB SA Sign Language and Sign Lang		Undefined					
Interpreting FIELD DESC	RIPTION		SUBFIEL	DESCRIP	TION		
Communication	on Studies and L	anguage	Language				
UNIT STAND	ARD CODE	UNIT STA	NDARD TYPE	NQF LEV	EL	CREDITS	
COM-LAN-0-S		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.



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 BAN				
SGB SA Sign Language and Sign Lang Interpreting			Undefined				
FIELD DESCR	RIPTION		SUBFIEL	DESCRIPTION			
Communicatio	n Studies and L	anguage	Language	- Control of the Cont			
UNIT STANDA	ARD CODE	UNIT STA	NDARD TYPE	NQF LEVEL	CREDITS		
COM-LAN-0-S	GB 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.



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			ABET BANK	PROVIDER NAME				
SGB SA Sign Language and Sign Lang Interpreting		Undefined						
FIELD DESCI	RIPTION		SUBFIELD DESCRIPTION					
Communication Studies and Language		Language						
UNIT STAND	ARD CODE	UNIT STA	NDARD TYPE	NQF LEVEL	CREDITS			
COM-LAN-0-S	GB SASLI Regular			Level 6	10			

Specific Outcomes:

SPECIFIC OUTCOME 1

Analyse Deaf culture in South Africa.

SPECIFIC OUTCOME 2

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

SPECIFIC OUTCOME 3

Carry out research into Deaf culture and the Deaf community.

SPECIFIC OUTCOME 4

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

SPECIFIC OUTCOME 5

Present research findings using SASL.

No. 809 9 June 2004



SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)

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

GET/FET Communication Studies and Language

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

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

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

The Director: Standards Setting and Development SAQA

Attention: Mr. D Mphuthing Postnet Suite 248

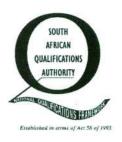
Private Bag X06
Waterkloof

or faxed to 012 – 431-5144 e-mail: mmphuting@saqa.co.za

0145

JOE SAMUELS

DIRECTOR: STANDARDS SETTING AND DEVELOPMENT



UNIT STANDARD:

1

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

SAQA US ID	UNIT STANDARD TITLE Access, process, adapt and use data from a wide range of texts						
115792							
SGB NAME			ABET BANK	PROVIDER NAME			
SGB Communication Studies			Undefined				
FIELD DESCI	RIPTION		SUBFIELD DESCRIPTION				
Communicatio	n Studies and L	anguage	Language				
UNIT STANDA	ARD CODE	UNIT STAI	NDARD TYPE	NQF LEVEL	CREDITS		
COM-LAN-0-S	GB COSTL	Regular		Level 5	5		

Specific Outcomes:

SPECIFIC OUTCOME 1

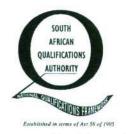
Analyse and respond to texts produced for a range of purposes, audiences, contexts in the workplace.

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.



UNIT STANDARD:

2

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

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115789	Sustain oral in	Sustain oral interaction across a wide range of contexts and critically evaluate spoken texts						
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Communication Studies			Undefined					
FIELD DESC	RIPTION		SUBFIELD DESCRIPTION					
Communicati	ion Studies and L	anguage	Language					
UNIT STANE	DARD CODE	UNIT STAN	DARD 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.



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 BANK	PROVIDER NAME			
SGB Communication Studies			Undefined				
FIELD DESCR	RIPTION		SUBFIELD	DESCRIPTION			
Communicatio	n Studies and L	anguage	Language				
UNIT STANDA	ARD CODE	UNIT STANL	DARD TYPE	NQF LEVEL	CREDITS		
COM-LAN-0-S	GB 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.



UNIT STANDARD:

4

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

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE					
115790	Write and present for a wide range of purposes, audiences and contexts						
			ABET BANK	PROVIDER NAME			
SGB Communication Studies			Undefined		- W		
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION			
Communication	on Studies and L	anguage	Language	***			
UNIT STAND	ARD CODE	UNIT STAN	DARD TYPE	NQF LEVEL	CREDITS		
COM-LAN-0-S	SGB COSTL	Regular	£1	Level 5	5		
		The second secon		The state of the s			

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.

No. 810 9 June 2004



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:

- 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;
- 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;
- 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.

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

			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

No. 811 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

Mining and Minerals

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

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

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

The Director: Standards Setting and Development

SAQA

Attention: Mr. D Mphuthing

Postnet Suite 248 Private Bag X06

Waterkloof

0145

or faxed to 012 - 431-5144

e-mail: dmphuthing@saqa.co.za

JOE SAMUELS

DIRECTOR: STANDARDS SETTING AND DEVELOPMENT



UNIT STANDARD:

1

Compact material using self propelled compactor with operator off board

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE					
115657	Compact material using self propelled compactor with operator off board						
SGB NAME			ABET BAN	D PROVIDER NAM	1E		
SGB Mining and Minerals			Undefined				
FIELD DESC	RIPTION	The state of the s	SUBFIELI	DESCRIPTION			
Manufacturing	g, Engineering a	nd Technology	Fabrication and Extraction				
UNIT STAND	ARD CODE	UNIT STAN	DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	SGB MM	Regular		Level 1	1		

Specific Outcomes:

SPECIFIC OUTCOME 1

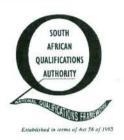
Prepare to compact an area.

SPECIFIC OUTCOME 2

Compact an area.

SPECIFIC OUTCOME 3

Monitor compacting operations.



UNIT STANDARD:

2

Conduct business presentations

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115645	Conduct busin	Conduct business presentations						
SGB NAME			ABET BAND	PROVIDER NAME				
SGB Mining and Minerals		Undefined						
FIELD DESC	CRIPTION		SUBFIELD	DESCRIPTION				
Manufacturin	g, Engineering a	nd Technology	Fabrication and Extraction					
UNIT STANL	DARD CODE	UNIT STAN	DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-	SGB MM	Regular		Level 1	2			

Specific Outcomes:

SPECIFIC OUTCOME 1

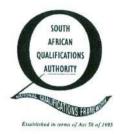
Prepare presentation.

SPECIFIC OUTCOME 2

Produce presentation.

SPECIFIC OUTCOME 3

Conduct a presentation.



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 BAN	D PROVIDER NAME			
SGB Mining and Minerals			Undefined				
FIELD DESCRIPTION			SUBFIELD DESCRIPTION				
Manufacturing, Engineering and Technology			Fabrication and Extraction				
UNIT STANDARD CODE UNIT STAND		ARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-SGB MM Regular			Level 1	. 3			

Specific Outcomes:

SPECIFIC OUTCOME 1

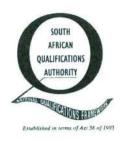
Demonstrate knowledge of basic terminology used in underground coal.

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.



UNIT STANDARD:

4

Operate a Chain Saw

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

Specific Outcomes:

SPECIFIC OUTCOME 1

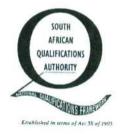
Prepare to operate a Chain Saw.

SPECIFIC OUTCOME 2

Operate Chain Saw.

SPECIFIC OUTCOME 3

Monitor Chain Saw operations.



UNIT STANDARD:

5

Sharpen a drill bit using a drill bit sharpener

SAQA US II	UNIT STAND	UNIT STANDARD TITLE					
115653	Sharpen a drill bit using a drill bit sharpener						
SGB NAME SGB Mining and Minerals			ABET BAND	PROVIDER NAME	PROVIDER NAME		
			Undefined				
FIELD DESCRIPTION			SUBFIELD	DESCRIPTION			
Manufacturing, Engineering and Technology			Fabrication and Extraction				
	DARD CODE	UNIT STANDARD TYP		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.



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	PROVIDER NAME	
SGB Mining and Minerals			Undefined			
FIELD DESCRIPTION			SUBFIELD DESCRIPTION			
Manufacturing, Engineering and Technology			Fabrication and Extraction			
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S		Regular		Level 1	4	

Specific Outcomes:

SPECIFIC OUTCOME 1

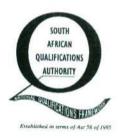
Prepare to Transport and distribute fuel.

SPECIFIC OUTCOME 2

Transport and distribute fuel.

SPECIFIC OUTCOME 3

Monitor transporting and distributing operations.



UNIT STANDARD:

8

Transport and dump material using a mechanical dumper

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115605	Transport and dump material using a mechanical dumper							
SGB NAME			ABET BAN		ER NAME			
SGB Mining and Minerals			Undefined	11101102	TO TO THE			
FIELD DESC			SUBFIELD	DESCRIPTION	ON			
Manufacturing	, Engineering a	nd Technology		and Extraction				
UNIT STAND	ARD CODE	UNIT STANL	DARD 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.



UNIT STANDARD:

9

Achieve excavation stability with support in a steep mining environment

SAQA US ID		UNIT STANDARD TITLE					
115672	Achieve excav	Achieve excavation stability with support in a steep mining environment					
SGB NAME			ABET BANK	PROVIDER NA	ME		
SGB Mining and Minerals			Undefined				
FIELD DESC	RIPTION		(m) (m) (m) (n) (n) (n)	DESCRIPTION			
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STANDARD CODE UNIT STAND			DARD 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.



UNIT STANDARD:

10

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

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE							
115640	Achieve excavation stability with support installation in high mining height areas in various geotechnical conditions								
SGB NAME			ABET BAN	D PROVIDER NAME					
SGB Mining and Minerals		Undefined							
FIELD DESCR	Control of the second s		SUBFIELI	DESCRIPTION					
Manufacturing	Engineering a	nd Technology	Fabrication and Extraction						
UNIT STANDARD CODE UNIT STAND		ARD 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.



UNIT STANDARD:

11

Analyse work content and identify workgroup needs

SAQA US IE		INIT STANDARD TITLE						
115521	Analyse work	Analyse work content and identify workgroup needs						
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals			Undefined					
FIELD DESC	CRIPTION			DESCRIPTION				
Manufacturir	ng, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-SGB MM Regular			Level 2	5				

Specific Outcomes:

SPECIFIC OUTCOME 1

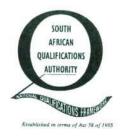
Analyse work content and identify competence requirements in relation to work demands.

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.



UNIT STANDARD:

12

Break rock using a hydraulic Rockbreaker

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE							
115612	Break rock us	Break rock using a hydraulic Rockbreaker							
SGB NAME			ABET BAN	D PROVIDER NAM	1E				
SGB Mining and Minerals			Undefined						
FIELD DESC	RIPTION	10-11-11-11-11-11-11-11-11-11-11-11-11-1	SUBFIELD	DESCRIPTION					
Manufacturing	g, Engineering a	nd Technology		and Extraction					
UNIT STAND	ARD CODE	UNIT STAN	DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-SGB MM Regular			Level 2	13					

Specific Outcomes:

SPECIFIC OUTCOME 1

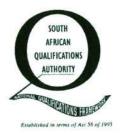
Prepare to break rock using a hydraulic rockbreaker.

SPECIFIC OUTCOME 2

Break rock using a hydraulic rockbreaker.

SPECIFIC OUTCOME 3

Monitor hydraulic rockbreaking operations.



UNIT STANDARD:

13

Carry out a close electrical inspection on a portable electrical equipment

SAQA US ID		UNIT STANDARD TITLE						
115560	Carry out a clo	Carry out a close electrical inspection on a portable electrical equipment						
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals			Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	g, Engineering ar	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD 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

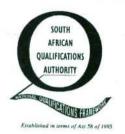
Prepare to carry out a close electrical inspection on portable electrical equipment.

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.



UNIT STANDARD:

14

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

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE							
115504	Carry out a clo	Carry out a close electrical inspection on an underground coal mining production machine							
SGB NAME			ABET BAN		PROVIDER NAME				
SGB Mining and Minerals			Undefined		The state of the s				
FIELD DESC	RIPTION		SUBFIEL	D DE	SCRIPTION				
Manufacturing	g, Engineering a	nd Technology			Extraction				
UNIT STAND	ARD CODE	UNIT STANL	DARD TYPE	NG	OF LEVEL	CREDITS			
MET-FBE-0-SGB MM Regular				vel 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.



UNIT STANDARD:

1

Transport personnel using a mini-bus taxi on mine property

SAQA US ID	UNIT STANDARD TITLE						
115617	Transport personnel using a m	port personnel using a mini-bus taxi on mine property					
SGB NAME	NSB ACRO	NYM	PROVIDER NAME				
SGB Mining a	NSB 06						
FIELD		SUBFIELD)				
Manufacturin	g, Engineering and Technology	Fabrication and Ex		Extraction			
ABET BAND UNIT STANE		DARD TYPE	NQI	ELEVEL	CREDITS		
Undefined Regular			Leve	el 1	4		

Specific Outcomes:

SPECIFIC OUTCOME 1

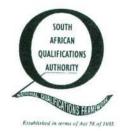
Prepare to transport personnel.

SPECIFIC OUTCOME 2

Transport personnel.

SPECIFIC OUTCOME 3

Monitor transporting operations.



UNIT STANDARD:

15

Carry out a detailed electrical inspection on a slag pot truck

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE							
115537	Carry out a detailed electrical inspection on a slag pot truck								
SGB NAME			ABET BANK						
SGB Mining and Minerals			Undefined		•				
FIELD DESCR	RIPTION		SUBFIELD	DESCRIPTION					
Manufacturing	, Engineering a	nd Technology		and Extraction					
UNIT STANDARD CODE UNIT STAND		DARD 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.



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 BANK	PROVIDER NAME				
SGB Mining and Minerals		Undefined		971				
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD 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.



UNIT STANDARD:

17

Classify material by means of a mechanical classifier

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE							
115606	Classify mater	Classify material by means of a mechanical classifier							
SGB NAME			ABET BAN		ROVIDER NAME				
SGB Mining and Minerals		Undefined			- L				
FIELD DESC	RIPTION		SUBFIEL	D DESC	RIPTION				
Manufacturing	g, Engineering a	nd Technology	Fabrication		FWHEEL 407-15-1110				
UNIT STAND	ARD CODE	UNIT STANL	DARD TYPE	NQF L	EVEL	CREDITS			
MET-FBE-0-SGB MM Regular			Level		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.



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 BANK	PROVIDER NAM	IE			
SGB Mining and Minerals		Undefined						
FIELD DESC	RIPTION		(E) (C) (C) (C) (C) (C) (C) (C)	DESCRIPTION				
Manufacturin	g, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD 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.



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 BAN				
SGB Mining and Minerals			Undefined		-		
FIELD DESCR		WHATE WE SEE THE SEE T	SUBFIEL	D DESCRIPTION			
Manufacturing	, Engineering a	nd Technology		n and Extraction			
UNIT STANDA	ARD CODE	UNIT STAN	DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-SGB MM Regular			Level 2	A			

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.



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 DESC	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STAND	ARD CODE	UNIT STAN	DARD TYPE	NQF LEVEL	CREDITS		
MET-EBE-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.



UNIT STANDARD:

21

Cut metal by means of a plasma cutter

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115542	Cut metal by n	Cut metal by means of a plasma cutter						
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals		Undefined						
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturin	g, Engineering a	nd Technology	Engineerin	g and Related Design				
UNIT STANDARD CODE UNIT STAND		DARD 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.



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 BAN	PROVIDER NAME			
SGB Mining and Minerals		Undefined					
FIELD DESCH	RIPTION		SUBFIEL	DESCRIPTION			
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STANDA	ARD CODE	UNIT STANL	DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	GB 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.



UNIT STANDARD:

23

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

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115702	Demonstrate a basic knowledge and understanding of the generic artificial support types, their characteristics and applications							
SGB NAME			ABET BANK	D PROVIDER NAI	ИE			
SGB Mining a	nd Minerals		Undefined					
FIELD DESCI	RIPTION		SUBFIELI	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	n and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD 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.



UNIT STANDARD:

24

Demonstrate a basic understanding of rock strengths and relevant testing methods

SAQA US ID	UNIT STAND	ARD TITLE			(i) (i) (ii) (ii) (ii) (ii) (ii) (ii) (
115665	Demonstrate	a basic understar	nding of rock st	rengt	hs and relevant test	ting methods	
SGB NAME			ABET BAN	D	PROVIDER NAME		=
SGB Mining a	and Minerals		Undefined		1,41		_
FIELD DESC	RIPTION	·	SUBFIELI	D DES	SCRIPTION		
Manufacturing	g, Engineering a	nd Technology	Fabrication	n and	Extraction		\exists
UNIT STAND	ARD CODE	UNIT STANI	DARD TYPE	NQ	F LEVEL	CREDITS	Ħ
MET-FBE-0-S	GB MM	Regular	-	Lev	el 2	2	\neg

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.



UNIT STANDARD:

25

Demonstrate a basic understanding of support principles

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115652	Demonstrate a	Demonstrate a basic understanding of support principles						
SGB NAME			ABET BANK	PROVIDER NAME	E			
SGB Mining and Minerals		Undefined						
FIELD DESC	RIPTION	Alle	SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering ar	nd Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	UNIT STAN	DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	GB MM	Regular		Level 2	2			

Specific Outcomes:

SPECIFIC OUTCOME 1

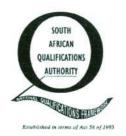
Demonstrate basic knowledge of support principles.

SPECIFIC OUTCOME 2

Demonstrate understanding of the importance of support principles.

SPECIFIC OUTCOME 3

Demonstrate basic knowledge of the application of support principles.



UNIT STANDARD:

26

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

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115637	Demonstrate a	Demonstrate a basic understanding of the concept of a Ground Control District						
SGB NAME			ABET BANK	PROVIDER NAM	E			
SGB Mining and Minerals		Undefined						
FIELD DESCI	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	UNIT STAN	DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	GB 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.

No. 26541



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 STANDA	INIT 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 a	nd Minerals		Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering an	d Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD 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.



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	La series de la se		ABET BANK	PROVIDER NAME			
SGB Mining at	nd Minerals		Undefined				
FIELD DESCR	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	, Engineering and T	echnology	Fabrication	and Extraction			
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-SGB MM Regular			Level 2	2			

Specific Outcomes:

SPECIFIC OUTCOME 1

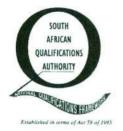
Demonstrate basic knowledge of the support function of pillars in mining.

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.



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 BANK	PROVIDER NAM	E		
SGB Mining and Minerals		Undefined					
FIELD DESCR	RIPTION		SUBFIELL	DESCRIPTION			
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-SGB MM Regular		A STATE OF THE STA	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.



UNIT STANDARD:

30

Demonstrate an understanding and use of a computer

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE							
115524	Demonstrate a	Demonstrate an understanding and use of a computer							
SGB NAME			ABET BANK	PROVIDER NAME	-				
SGB Mining and Minerals		Undefined							
FIELD DESC	RIPTION	1000	SUBFIELL	DESCRIPTION					
Manufacturin	g, Engineering ar	nd Technology	Fabrication	and Extraction					
UNIT STANDARD CODE UNIT STAND		DARD 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.



UNIT STANDARD:

31

Demonstrate an understanding of basic risk assessment concepts and processes

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE							
115558	Demonstrate an understanding of basic risk assessment concepts and processes								
SGB NAME			ABET BAND	PROVIDER NAMI	E				
SGB Mining and Minerals			Undefined						
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION					
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction					
UNIT STAND	NDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-S	GB 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.



UNIT STANDARD:

32

Demonstrate an understanding of budget and cost control

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115674	Demonstrate an understanding of budget and cost control							
SGB NAME			ABET BANK	PRO	PROVIDER NAME			
SGB Mining and Minerals		Minerals Unde						
FIELD DESC	RIPTION		SUBFIELL	DESCRI	PTION			
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extra	action	***************************************		
UNIT STAND	NIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LE	VEL	CREDITS		
MET-FBE-0-S	Γ-FBE-0-SGB MM Regular			Level 2		1		

Specific Outcomes:

SPECIFIC OUTCOME 1

Monitor budgets and costs.

SPECIFIC OUTCOME 2

Control costs within budget.



UNIT STANDARD:

33

Demonstrate an understanding of the importance of support installation quality

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE							
115658	Demonstrate an understanding of the importance of support installation quality								
SGB NAME SGB Mining and Minerals			ABET BAN	PROVIDER NAME					
			Undefined						
FIELD DESC	RIPTION		SUBFIELI	DESCRIPTION					
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction	Walley Control of the				
UNIT STAND	T STANDARD CODE UNIT STANI		DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-S	GB 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.



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 DESCH	RIPTION	· · · · · · · · · · · · · · · · · · ·	SUBFIELD	DESCRIPTION			
Manufacturing	, Engineering ar	d Technology	Fabrication	and Extraction			
UNIT STANDA	ARD CODE	UNIT STAND	ARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	GB MM	Regular		Level 2	3		

Specific Outcomes:

SPECIFIC OUTCOME 1

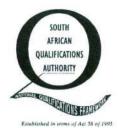
Plan and prepare for topsoil stockpiling.

SPECIFIC OUTCOME 2

Conduct stockpiling.

SPECIFIC OUTCOME 3

Monitor stockpile activities.



UNIT STANDARD:

35

Demonstrate basic knowledge and understanding of geology related to mining

SAQA US ID	UNIT STAND	JNIT STANDARD TITLE							
115678	Demonstrate basic knowledge and understanding of geology related to mining								
SGB NAME			ABET BANL	PROVIDER NAME	pire				
SGB Mining and Minerals		Minerals							
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION					
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction					
UNIT STAND	ARD CODE	UNIT STANI	DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-S	GB MM	Regular		Level 2	1				

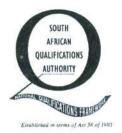
Specific Outcomes:

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.



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	1000000		ABET BAND	PROVIDER NAME			
SGB Mining ar	nd Minerals		Undefined				
FIELD DESCR	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	, Engineering ar	nd Technology	Fabrication	Fabrication and Extraction			
UNIT STANDARD CODE UNIT STAND		DARD 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

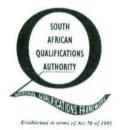
Demonstrate basic knowledge of rock strength.

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.



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 BAN	D PROVIDER NAME			
SGB Mining ar	nd Minerals Uni		Minerals Undefined				
FIELD DESCR	RIPTION		SUBFIEL	D DESCRIPTION			
Manufacturing	, Engineering a	nd Technology		n and Extraction			
UNIT STANDARD CODE UNIT STAND		DARD 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.



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 BANK	PROVIDER NAM	E		
SGB Mining a	nd Minerals		Undefined				
FIELD DESCI	RIPTION	PTION		DESCRIPTION			
Manufacturing	, Engineering ar	nd Technology	Fabrication	Fabrication and Extraction			
UNIT STANDARD CODE UNIT STAND		DARD 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

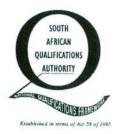
Demonstrate understanding of the risks associated with re-opening excavations and remedial action.

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.



UNIT STANDARD:

39

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

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115680	Demonstrate basic knowledge of, and ability to record results from, instrumentation applicable to Rock Engineering							
SGB NAME			ABET BAN	PROVIDER NAME				
SGB Mining and Minerals		Undefined						
FIELD DESCR	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD 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.



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		Minerals Undefined					
FIELD DESCI	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	, Engineering a	nd Technology	Fabrication	Fabrication and Extraction			
UNIT STAND	STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S				Level 2	2		

Specific Outcomes:

SPECIFIC OUTCOME 1

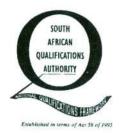
Demonstrate basic knowledge of the response of rock mass to surface mining.

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.



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 BAN	PROVIDER NAM	E		
SGB Mining and Minerals			Undefined				
FIELD DESCH	RIPTION		SUBFIEL	DESCRIPTION			
Manufacturing	, Engineering a	nd Technology		and Extraction			
UNIT STANDA	ARD CODE	UNIT STAN	DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	GB 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.



UNIT STANDARD:

42

Demonstrate the ability to manage conflict

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115519	Demonstrate t	Demonstrate the ability to manage conflict						
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals			Undefined					
FIELD DESC	RIPTION	200	SUBFIELD	DESCRIPTION				
Manufacturin	g, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANE	INIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-	SGB MM	MM Regular		Level 2	1			

Specific Outcomes:

SPECIFIC OUTCOME 1

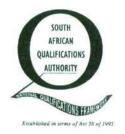
Identify potential sources of conflict.

SPECIFIC OUTCOME 2

Identify range of alternative approaches.

SPECIFIC OUTCOME 3

Resolve conflict.



UNIT STANDARD:

43

Dispatch bullion

SAQA US IE	UNIT STAND	UNIT STANDARD TITLE						
115601	Dispatch bullion	Dispatch bullion						
SGB NAME			ABET BAND	PROVIDER NAME				
SGB Mining and Minerals		Undefined						
FIELD DESC	CRIPTION		SUBFIELD	DESCRIPTION				
Manufacturin	g, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-	GB MM Regular			Level 2	4			

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge relating to the dispatch process.

SPECIFIC OUTCOME 2

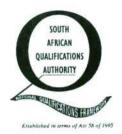
Prepare to dispatch bullion.

SPECIFIC OUTCOME 3

Dispatch bullion.

SPECIFIC OUTCOME 4

Complete the duties pertaining to the dispatch process.



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 BANK)	PROVIDER NAME			
SGB Mining and Minerals			Undefined				
FIELD DESC	RIPTION		SUBFIELD	D DE	SCRIPTION		
Manufacturing	, Engineering a	nd Technology	Fabrication	n an	d Extraction		
UNIT STAND	NIT STANDARD CODE UNIT STAND		DARD TYPE	N	QF LEVEL	CREDITS	
MET-FBE-0-S	GB MM	Regular		Le	evel 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.



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 BAN	ABET BAND PROVIDER NAME			
SGB Mining and Minerals			Undefined				
FIELD DESCR	RIPTION		SUBFIELL	DESCRIPTION			
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STANDA	ARD CODE	UNIT STANL	DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	GB 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.



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 BANK	PROVIDER NAME			
SGB Mining and Minerals			Undefined				
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	g, Engineering ar	nd Technology	Engineerin	g and Related Design			
UNIT STANDARD CODE UNIT STAND		DARD 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

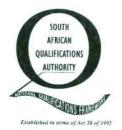
Prepare to repair a steel pipe section.

SPECIFIC OUTCOME 3

Repair the steel pipe section.

SPECIFIC OUTCOME 4

Complete the repairing process.



UNIT STANDARD:

47

Fabricate steel components

SAQA US ID	UNIT STANDARD TITLE Fabricate steel components						
115536							
SGB NAME			ABET BAN	D PROVIDER NAME			
SGB Mining and Minerals		Undefined					
FIELD DESCH	RIPTION		SUBFIELL	DESCRIPTION			
Manufacturing	, Engineering a	nd Technology	Engineerin	ng and Related Design			
UNIT STANDARD CODE UNIT STAND			NQF LEVEL	CREDITS			
MET-ENG-0-S	GB MM	Regular	*	Level 2	5		

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to the fabrication of steel components.

SPECIFIC OUTCOME 2

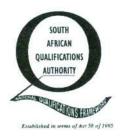
Prepare to fabricate steel components.

SPECIFIC OUTCOME 3

Fabricate the steel components.

SPECIFIC OUTCOME 4

Complete the fabrication process.



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 BANK	PROVIDER NAME				
SGB Mining and Minerals			Undefined				
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	g, Engineering ar	nd Technology	Fabrication	and Extraction			
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	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.



UNIT STANDARD:

49

Generate steam by means of an electric boiler

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115569	Generate stea	Generate steam by means of an electric boiler						
SGB NAME			ABET BAN	D PROVIDER NAME				
SGB Mining and Minerals		Undefined						
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturin	g, Engineering a	nd Technology	Fabrication	n and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-S	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.



UNIT STANDARD:

50

Grind material by means of an ISA mill

SAQA US ID	UNIT STANDARD TITLE Grind material by means of an ISA mill						
115642							
SGB NAME			ABET BANK	PROVIDER NAME			
SGB Mining and Minerals		Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STAND	ARD CODE	UNIT STANDARD TY		NQF LEVEL	CREDITS		
MET-FBE-0-S	GB 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.



UNIT STANDARD:

51

Grind steel by means of an angle grinder

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115679	Grind steel by means of an angle grinder							
SGB NAME			ABET BAN	PROVIDER NAM	E			
SGB Mining and Minerals		Undefined						
FIELD DESC	RIPTION		SUBFIEL	DESCRIPTION				
Manufacturin	g, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-S	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

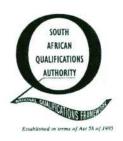
Prepare to grind steel by means of an angle grinder.

SPECIFIC OUTCOME 3

Grind steel by means of an angle grinder.

SPECIFIC OUTCOME 4

Complete the grinding process.



UNIT STANDARD:

52

Handle cyanide safely in a laboratory

SAQA US ID	UNIT STANDARD TITLE Handle cyanide safely in a laboratory						
115505							
SGB NAME			ABET BAND	PROVIDER NAME			
SGB Mining and Minerals		Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	, Engineering a	nd Technology	Engineering	g and Related Design			
UNIT STAND	ARD CODE	UNIT STAN	DARD 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

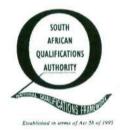
Prepare to handle cyanide.

SPECIFIC OUTCOME 3

Handle cyanide.

SPECIFIC OUTCOME 4

Complete the duties pertaining to cyanide handling.



UNIT STANDARD:

53

Handle flexible electrical cables

SAQA US II	D UNIT STANDA	UNIT STANDARD TITLE Handle flexible electrical cables						
115538	Handle flexible							
SGB NAME SGB Mining and Minerals			ABET BAN	PROVIDER NAME				
			Undefined					
FIELD DES	CRIPTION		SUBFIEL	DESCRIPTION				
Manufacturii	ng, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD 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.



UNIT STANDARD:

54

Inspect a safety detaching hook

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115567	Inspect a safety detaching hook							
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals		Undefined						
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-S	GB 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.



UNIT STANDARD:

55

Inspect and charge a traction battery

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE					
115556	Inspect and ch	Inspect and charge a traction battery					
SGB NAME			ABET BANK	PROVIDER NAME			
SGB Mining and Minerals		Undefined					
FIELD DESC	RIPTION	AAAA	SUBFIELL	DESCRIPTION			
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STAND	IIT STANDARD CODE UNIT STANDA		DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	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

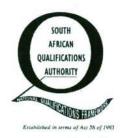
Prepare to inspect and charge the traction battery.

SPECIFIC OUTCOME 3

Inspect and charge the traction battery.

SPECIFIC OUTCOME 4

Confirm traction battery condition and prepare for operation.



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 BANK	PROVIDER NAME	E		
SGB Mining and Minerals			Undefined				
FIELD DESCI	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	, Engineering a	nd Technology	Fabrication	Fabrication and Extraction			
UNIT STANDA	ARD CODE	UNIT STAN	DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	GB 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.



UNIT STANDARD:

58

Install domestic type fixed units

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE					
115510	Install domesti	ic type fixed units					
SGB NAME		San Company Company	ABET BAND	PROVIDER NAME			
SGB Mining and Minerals		Undefined					
FIELD DESC	CRIPTION		SUBFIELD	DESCRIPTION			
Manufacturin	g, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STANDARD CODE UNIT STAND		DARD 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.



UNIT STANDARD:

59

Join metal by means of a spot welder

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115735	Join metal by	Join metal by means of a spot welder						
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals		Undefined						
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS			
MET-FBE-0-9	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.



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 DESCI	RIPTION		SUBFIELD	DESCRIPTION		
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction		
UNIT STANDA	ARD CODE	UNIT STANL	DARD TYPE	NQF LEVEL	CREDITS	
MET-FBE-0-S	GB 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.



UNIT STANDARD:

61

Maintain the catalyst in a sulphur dioxide converter

SAQA US ID	UNIT STANDARD TITLE						
115618	Maintain the ca	Maintain the catalyst in a sulphur dioxide converter					
SGB NAME			ABET BANK	PROVIDER NAME	E		
SGB Mining and Minerals			Undefined				
FIELD DESC	RIPTION		SUBFIELD DESCRIPTION				
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STAND	T STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	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.



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 SGB Mining and Minerals			ABET BAN	PROVIDER NAM	1E		
			Undefined		1		
FIELD DESC	RIPTION		SUBFIELD DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction	THE RESERVE THE PARTY OF THE PA		
UNIT STAND	ANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	GB 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

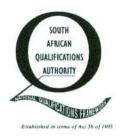
Prepare to make-up a sodium sulphate solution.

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.



UNIT STANDARD:

63

Measure and mark off steel profiles

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115533	Measure and n	Measure and mark off steel profiles						
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals			Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	g, Engineering ar	nd Technology	Engineerin	g and Related Design				
UNIT STAND	ARD CODE	D CODE UNIT STANDA		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.



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 SGB Mining and Minerals			ABET BAN	PROVIDER NAME			
			Undefined				
FIELD DESCI	RIPTION		SUBFIELD	DESCRIPTION	January VIII January		
Manufacturing	, Engineering ar	nd Technology	Fabrication	and Extraction			
UNIT STAND	STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	GB 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.



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 DESCI	RIPTION	"	SUBFIELD	DESCRIPTION		
Manufacturing	, Engineering and	Technology	Fabrication	and Extraction		
UNIT STAND	ARD CODE	UNIT STAND	ARD TYPE	NQF LEVEL	CREDITS	
MET-FBE-0-S	GB 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.



UNIT STANDARD:

66

Operate the global positioning system (GPS)

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115638	Operate the gl	Operate the global positioning system (GPS)						
SGB NAME			ABET BANK	PROVIDER	NAME			
SGB Mining and Minerals		Undefined						
FIELD DESC	RIPTION		SUBFIELL	DESCRIPTION				
Manufacturin	g, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	OARD CODE	UNIT STANDARD TY		NQF LEVEL	CREDITS			
MET-FBE-0-	SGB MM	Regular		Level 2	5			

Specific Outcomes:

SPECIFIC OUTCOME 1

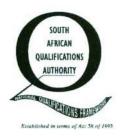
Prepare and plan the surveying process with global positioning system.

SPECIFIC OUTCOME 2

Implement surveying.

SPECIFIC OUTCOME 3

Monitor the global positioning system operations.



UNIT STANDARD:

67

Overhaul a 3-phase induction motor

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115700	Overhaul a 3-ph	Overhaul a 3-phase induction motor						
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining a	and Minerals		Undefined					
FIELD DESC	RIPTION		SUBFIELD DESCRIPTION					
Manufacturing	g, Engineering an	d Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS			
MET-FBE-0-S	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.



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 SGB Mining and Minerals			ABET BANK	PROVIDER NAME			
			Undefined	11 × 30 11 × 30 11 × 11 × 11 × 11 × 11 ×			
FIELD DESCI	RIPTION		SUBFIELL	DESCRIPTION			
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction	11 (%)		
UNIT STANDA	ARD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS		
MET-FBE-0-S	GB MM	Regular		Level 2	4		
	The state of the s						

Specific Outcomes:

SPECIFIC OUTCOME 1

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

SPECIFIC OUTCOME 2

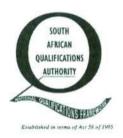
Prepare to overhaul a final drive/planetary system.

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.



UNIT STANDARD:

69

Perform standard aggregates physical tests

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE					
115553	Perform standard aggregates physical tests						
SGB NAME SGB Mining and Minerals		ABET BANK	PROVIDER NAME				
		Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	g, Engineering ar	d Technology	Fabrication	and Extraction			
UNIT STANDARD CODE UNIT STANDA		ARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	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

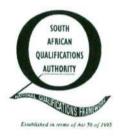
Conduct physical tests.

SPECIFIC OUTCOME 4

Interpret and report physical testing results.

SPECIFIC OUTCOME 5

Follow basic health and safety practices during physical testing.



UNIT STANDARD:

70

Perform standard cement industry physical tests

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115543	Perform standard cement industry physical tests							
SGB NAME SGB Mining and Minerals			ABET BANK	PROVIDER NAM	E			
			Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS			
MET-FBE-0-S	GB 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.



UNIT STANDARD:

71

Plan and conduct interviews

SAQA US I	D UNIT STANDA	UNIT STANDARD TITLE					
115785	Plan and cond	Plan and conduct interviews					
SGB NAME			ABET BANK	PROVIDER NAME			
SGB Mining and Minerals		Undefined					
FIELD DES	CRIPTION	IPTION		DESCRIPTION			
Manufacturi	ng, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STAN	IDARD CODE	DE 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.



UNIT STANDARD:

72

Plan and organise individual work

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115610	Plan and organise individual work							
SGB NAME SGB Mining and Minerals			ABET BANK	PROVIDER NAME	-			
			Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS			
MET-FBE-0-S	GB MM	Regular		Level 2	5			

Specific Outcomes:

SPECIFIC OUTCOME 1

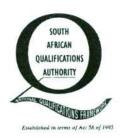
Plan and prepare for work.

SPECIFIC OUTCOME 2

Complete work as planned.

SPECIFIC OUTCOME 3

Monitor work performance.



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 SGB Mining and Minerals			ABET BANK	PROVIDER NAME			
			Undefined				
FIELD DESC	RIPTION	IPTION		DESCRIPTION			
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STAND	ARD CODE	UNIT STAN	DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	GB MM	Regular		Level 2	4		

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge relating to the pulling of electrodes.

SPECIFIC OUTCOME 2

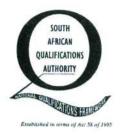
Prepare to pull electrodes.

SPECIFIC OUTCOME 3

Pull electrodes.

SPECIFIC OUTCOME 4

Complete the duties pertaining to the pulling of electrodes.



UNIT STANDARD:

74

Pulverise a Platinum Group Metal

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115712	Pulverise a Platinum Group Metal							
SGB NAME SGB Mining and Minerals			ABET BAN	PROVIDER NAM	E			
			Undefined					
FIELD DESCI	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS			
MET-FBE-0-S	GB MM	Regular		Level 2	3			

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge relating to pulverising a Platinum Group Metal.

SPECIFIC OUTCOME 2

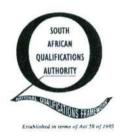
Prepare to pulverise a Platinum Group Metal.

SPECIFIC OUTCOME 3

Pulverise a Platinum Group Metal.

SPECIFIC OUTCOME 4

Complete the duties pertaining to the pulverising process.



UNIT STANDARD:

75

Receive and register samples in a laboratory

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE					
115501	Receive and register samples in a laboratory						
SGB NAME ABET BA			ABET BAND	PROVIDER NAME			
SGB Mining and Minerals		Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	g, Engineering a	nd Technology	Engineerin	g and Related Design			
UNIT STAND	ARD CODE	UNIT STAN	DARD TYPE	NQF LEVEL	CREDITS		
MET-ENG-0-S	SGB MM	Regular		Level 2	3		

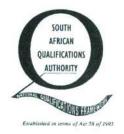
Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge relating to receipt and registration of samples.

SPECIFIC OUTCOME 2

Receive and register samples.



UNIT STANDARD:

76

Recover a vehicle with manual transmission

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115754	Recover a vehicle with manual transmission							
SGB NAME SGB Mining and Minerals			ABET BANK	PROVIDER NAM				
			Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	g, Engineering ar	nd Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS			
MET-FBE-0-S	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.



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 SGB Mining and Minerals			ABET BANK	PROVIDER NAME		
			Undefined			
FIELD DESC	RIPTION	***************************************	SUBFIELD DESCRIPTION			
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction		
UNIT STAND	ARD CODE	UNIT STANI	DARD TYPE	NQF LEVEL	CREDITS	
MET-FBE-0-S	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

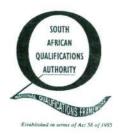
Prepare to precipitate uranium.

SPECIFIC OUTCOME 3

Precipitate uranium.

SPECIFIC OUTCOME 4

Complete the duties pertaining to the precipitation process.



UNIT STANDARD:

80

Repair planetary gear system

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE					
115765	Repair planeta	Repair planetary gear system					
SGB NAME			ABET BAND PROVIDER NAME				
SGB Mining and Minerals		Undefined					
FIELD DESC	RIPTION		SUBFIELI	DESCRIPTION			
Manufacturin	g, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STAND	DARD 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.



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 BANK	PROVIDER NAME	•	
SGB Mining and Minerals		Undefined				
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION		
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction	1500	
UNIT STAND	ARD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS	
MET-FBE-0-S	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.



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 BAN	D P	ROVIDER NAME		
SGB Mining and Minerals		Undefined					
FIELD DESCI	RIPTION		SUBFIELL	D DESC	CRIPTION		
Manufacturing	, Engineering a	nd Technology	Fabrication				
UNIT STANDA	ARD CODE	UNIT STANI	DARD TYPE	NQF	LEVEL	CREDITS	
MET-FBE-0-S	GB MM	Regular		Level	12	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.



UNIT STANDARD:

83

Replace a steering box on a self-propelled mobile machine

SAQA US ID	UNIT STANDARD TITLE						
115561	Replace a stee	ering box on a se	If-propelled mo	bile machine			
SGB NAME	The state of the s		ABET BANK	PROVIDER NAME			
SGB Mining a	nd Minerals		Undefined				
FIELD DESC	RIPTION		SUBFIELL	DESCRIPTION			
Manufacturing, Engineering and Technology			Fabrication	and Extraction			
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS			
MET-EBE-0-S	GB 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

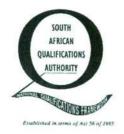
Prepare to replace the steering box.

SPECIFIC OUTCOME 3

Replace the steering box.

SPECIFIC OUTCOME 4

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



UNIT STANDARD:

84

Replace components on a jaw type crusher

SAQA US IE	UNIT STAND	UNIT STANDARD TITLE						
115656	Replace comp	Replace components on a jaw type crusher						
SGB NAME			ABET BANK	PROVIDER NAME	-			
SGB Mining and Minerals			Undefined					
FIELD DESC	CRIPTION		SUBFIELL	DESCRIPTION				
Manufacturin	g, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANL	DARD CODE	UNIT STAN	DARD 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.



UNIT STANDARD:

85

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

SAQA US ID	UNIT STANDARD TITLE						
115563	Replace comp	onents on a liquid	d cooling syste	m of a self-p	propelled mobile n	nachine	
SGB NAME			ABET BANK	PROVI	DER NAME		
SGB Mining and Minerals		Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPT	TION		
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extract	tion		
UNIT STAND	ARD CODE	UNIT STAND	DARD TYPE	NQF LEVE	EL	CREDITS	
MET-FBE-0-S	SGB MM	Regular		Level 2		3	

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to replacing cooling system components.

SPECIFIC OUTCOME 2

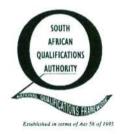
Prepare to replace the cooling system components.

SPECIFIC OUTCOME 3

Replace the cooling system components.

SPECIFIC OUTCOME 4

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



UNIT STANDARD:

86

Replace components on the boom assembly of a back actor

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115769	Replace comp	onents on the bo	om assembly	of a back actor				
SGB NAME		о под под под под под под под под под по	ABET BANK	PROVIDER NAME				
SGB Mining and Minerals		Undefined						
FIELD DESC	RIPTION		SUBFIELL	DESCRIPTION				
Manufacturin	g, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	UNIT STANI	DARD 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.



UNIT STANDARD:

87

Replace conveyor belt steel structures (stringers, cradles)

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115547	Replace conve	Replace conveyor belt steel structures (stringers, cradles)						
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining a	and Minerals	The state of the s	Undefined					
FIELD DESC	RIPTION		SUBFIELL	DESCRIPTION				
Manufacturing	g, Engineering a	nd Technology	Engineerin	g and Related Design				
UNIT STAND	IIT STANDARD CODE UNIT STANDAR		DARD TYPE	NQF LEVEL	CREDITS			
MET-ENG-0-9	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.



UNIT STANDARD:

88

Replace dipper handles and dipper on a rope shovel

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115766	Replace dippe	Replace dipper handles and dipper on a rope shovel						
SGB NAME			ABET BANK	PROVIDER NAMI	E			
SGB Mining and Minerals		Undefined						
FIELD DESC	RIPTION		SUBFIELL	DESCRIPTION				
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	UNIT STANI	DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	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.



UNIT STANDARD:

89

Replace fuel system components on a self-propelled mobile machine

SAQA US ID	UNIT STANDARD TITLE						
115570	Replace fuel s	ystem componer	its on a self-pro	pelled mobile machine	W-14-		
SGB NAME			ABET BANK	PROVIDER NAME			
SGB Mining and Minerals		Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STAND	STANDARD CODE UNIT STANDA		DARD 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.



UNIT STANDARD:

90

Replace hoist ropes on a rope shovel

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE					
115771	Replace hoist	Replace hoist ropes on a rope shovel					
SGB NAME	- The was who should		ABET BANK	PROVIDER NAM	E		
SGB Mining and Minerals		Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturin	g, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STAND	ARD CODE	UNIT STANI	DARD 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

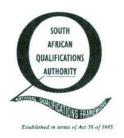
Prepare to replace the hoist ropes.

SPECIFIC OUTCOME 3

Replace the hoist ropes.

SPECIFIC OUTCOME 4

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



UNIT STANDARD:

91

Replace tandem drive of self-propelled machine

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115720	Replace tande	Replace tandem drive of self-propelled machine						
SGB NAME		1,100	ABET BANK	D	PROVIDER NAME			
SGB Mining and Minerals			Undefined		***************************************			
FIELD DESC	RIPTION		SUBFIELD	DE	SCRIPTION			
Manufacturing	g, Engineering ar	nd Technology	Fabrication	n and	Extraction			
UNIT STAND	ARD CODE	UNIT STAN	DARD TYPE	NQ	F LEVEL	CREDITS		
MET-FBE-0-SGB MM Regular		101-20-20-20-20-20-20-20-20-20-20-20-20-20-	Lev	el 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.



UNIT STANDARD:

92

Replace the boom on a hydraulic face drill rig

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115724	Replace the be	Replace the boom on a hydraulic face drill rig						
SGB NAME			ABET BAND	PROVIDER NAME				
SGB Mining a	nd Minerals		Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	UNIT STANL	DARD 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.



UNIT STANDARD:

93

Replace the bucket assembly of a dragline

SAQA US ID	UNIT STANDARD TITLE						
115727	Replace the bu	Replace the bucket assembly of a dragline					
SGB NAME			ABET BANK	PROVIDER NAM	E		
SGB Mining and Minerals		Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION	- 18 S. R. S. R. S. R. S. R. S.		
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	SGB MM	Regular	711111111	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.



UNIT STANDARD:

94

Replace the crusher drum on a feeder breaker

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115730	Replace the crusher drum on a feeder breaker							
SGB NAME SGB Mining and Minerals			ABET BAN	D PROVIDER NAME				
			Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	Fabrication and Extraction				
UNIT STAND	ARD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS			
MET-FBE-0-S	GB 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

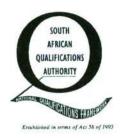
Prepare to replace the crusher drum on a feeder breaker.

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.



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 BANK	PROVIDER NAME			
SGB Mining and Minerals		Undefined					
FIELD DESC	RIPTION		SUBFIELL	DESCRIPTION			
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STAND	ARD CODE	UNIT STAN	DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	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.



UNIT STANDARD:

96

Replace the drive shaft of a self-propelled mobile machine

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115747	Replace the drive shaft of a self-propelled mobile machine							
SGB NAME SGB Mining and Minerals			ABET BAN	ABET BAND PROVIDER NAME				
			Undefined					
FIELD DESCI	RIPTION		SUBFIELD					
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction	Sue in the supplier of the sup			
UNIT STAND	ARD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS			
MET-FBE-0-S	GB MM	Regular		Level 2	1			
				and the state of t				

Specific Outcomes:

SPECIFIC OUTCOME 1

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

SPECIFIC OUTCOME 2

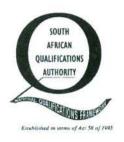
Prepare to replace drive shafts.

SPECIFIC OUTCOME 3

Replace drive shafts.

SPECIFIC OUTCOME 4

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



UNIT STANDARD:

97

Replace the fair-lead frame on a dragline

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115732	Replace the fair-lead frame on a dragline							
SGB NAME SGB Mining and Minerals			ABET BANK	PROVIDER NAM	E			
			Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	g, Engineering a	nd Technology	Fabrication	Fabrication and Extraction				
UNIT STAND	ARD CODE	UNIT STANI	DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	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

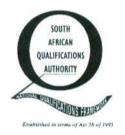
Prepare to replace the fairlead frame of a dragline.

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.



UNIT STANDARD:

98

Replace the saddle block of a rope shovel

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115767	Replace the saddle block of a rope shovel							
SGB NAME			ABET BANK	PROVIDER NAME	E			
SGB Mining and Minerals			Undefined					
FIELD DESC	RIPTION		SUBFIELD DESCRIPTION					
Manufacturing	g, Engineering a	nd Technology	Fabrication	Fabrication and Extraction				
UNIT STAND	ARD CODE	UNIT STANI	DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	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

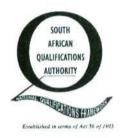
Prepare to replace the saddle block.

SPECIFIC OUTCOME 3

Replace the saddle block.

SPECIFIC OUTCOME 4

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



UNIT STANDARD:

99

Replace track pads on earth moving equipment

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115760	Replace track pads on earth moving equipment							
			ABET BANK	PROVIDER NAME	:			
			Undefined	Undefined				
FIELD DESC	RIPTION		SUBFIELD	LD DESCRIPTION				
Manufacturing	g, Engineering a	nd Technology	Fabrication	Fabrication and Extraction				
UNIT STAND	ARD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS			
MET-FBE-0-S	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

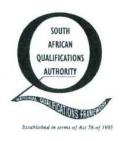
Prepare to replace track pad on earth moving equipment.

SPECIFIC OUTCOME 3

Replace track pad on earth moving equipment.

SPECIFIC OUTCOME 4

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



UNIT STANDARD:

100

Replace tracks of earth moving equipment

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115716	Replace tracks of earth moving equipment							
SGB NAME SGB Mining and Minerals			ABET BAN	PROVIDER NAM	E			
			Undefined					
FIELD DESC	RIPTION		SUBFIELD DESCRIPTION					
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS			
MET-FBE-0-S	GB MM	Regular	un in the second second second second	Level 2	2			

Specific Outcomes:

SPECIFIC OUTCOME 1

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

SPECIFIC OUTCOME 2

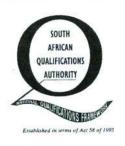
Prepare to replace tracks.

SPECIFIC OUTCOME 3

Replace the tracks.

SPECIFIC OUTCOME 4

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



UNIT STANDARD:

101

Replace undercarriage components of earth moving equipment

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115711	Replace undercarriage components of earth moving equipment							
SGB NAME SGB Mining and Minerals			ABET BANK	PROVIDER NAME				
			Undefined					
FIELD DESC	RIPTION		SUBFIELL	SUBFIELD DESCRIPTION				
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS			
MET-FBE-0-S	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

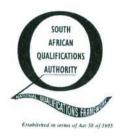
Prepare to replace undercarriage components.

SPECIFIC OUTCOME 3

Replace undercarriage components.

SPECIFIC OUTCOME 4

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



UNIT STANDARD:

102

Retrieve minerals from sand dunes using a floating dredger

SAQA US ID	UNIT STAND	JNIT STANDARD TITLE						
115669	Retrieve minerals from sand dunes using a floating dredger							
SGB NAME SGB Mining and Minerals				ABET BAND PROVIDER NAME				
			Undefined					
FIELD DESCR	RIPTION		SUBFIELD DESCRIPTION					
Manufacturing	, Engineering a	nd Technology		and Extraction				
UNIT STANDA	DARD CODE UNIT STAND		DARD 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.



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 BA			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals			Undefined					
FIELD DESC	RIPTION		SUBFIELL	DESCRIPTION				
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS			
MET-FBE-0-S		Regular		Level 2	6			

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge relating to the separation of liquid from solids.

SPECIFIC OUTCOME 2

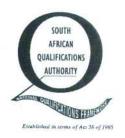
Prepare to separate liquid from solids.

SPECIFIC OUTCOME 3

Separate liquid from solids.

SPECIFIC OUTCOME 4

Complete duties pertaining to the filtration process.



UNIT STANDARD:

104

Service equipment using a service truck

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

Specific Outcomes:

SPECIFIC OUTCOME 1

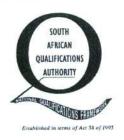
Prepare to service equipment using a service truck.

SPECIFIC OUTCOME 2

Service equipment using a service truck.

SPECIFIC OUTCOME 3

Monitor servicing operations.



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 DESC	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STAND	ARD CODE	UNIT STAN	DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	SGB MM	Regular		Level 2	1		

Specific Outcomes:

SPECIFIC OUTCOME 1

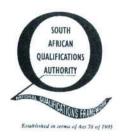
Define the problem.

SPECIFIC OUTCOME 2

Identify the preferred option for solving the problem.

SPECIFIC OUTCOME 3

Prepare and implement action plan.



UNIT STANDARD:

106

Straighten steel profiles

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115529	Straighten steel profiles							
SGB NAME			ABET BAN	D PROVIDER NAME				
SGB Mining ar	nd Minerals		Undefined	- TO THE ENTRY IN				
FIELD DESCR	RIPTION		SUBFIEL	DESCRIPTION				
Manufacturing,	Engineering a	nd Technology		ig and Related Design				
UNIT STANDA	RD CODE	UNIT STANE		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.



UNIT STANDARD:

107

Support in blasting operations

SAQA US					
115527	Support in blas	sting operations			
SGB NAME		ABET BANK	PROVIDER NAME		
SGB Mining	g and Minerals		Undefined		
FIELD DES	SCRIPTION			DESCRIPTION	
Manufactur	ing, Engineering a	nd Technology	Fabrication	and Extraction	
UNIT STAI	NDARD CODE	UNIT STANI	DARD TYPE	NQF LEVEL	CREDITS
MET-FBF-0-SGB MM Regular			Level 2	4	

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare to charge shot holes.

SPECIFIC OUTCOME 2

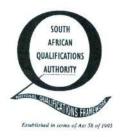
Charge shot holes.

SPECIFIC OUTCOME 3

Demonstrate relevant legal knowledge of explosives and accessories.

SPECIFIC OUTCOME 4

Demonstrate knowledge of types of explosives and accessories.



UNIT STANDARD:

108

Tap material from a furnace by means of lancing

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115719	Tap material fi	Tap material from a furnace by means of lancing						
SGB NAME	11		ABET BAN	PROVID	ER NAME			
SGB Mining and Minerals			Undefined			***		
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION	ON			
Manufacturing	g, Engineering a	nd Technology		and Extraction				
UNIT STAND	ARD CODE	UNIT STANI	DARD 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.



UNIT STANDARD:

109

Use and care for engineering hand tools

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE					
115779	Use and care for engineering hand tools						
SGB NAME		ABET BAND	PROVIDER NAME				
SGB Mining and Minerals		Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STAND	ARD CODE	UNIT STAN	DARD 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.



UNIT STANDARD:

110

Use and care for hand held power tools

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE					
115654	Use and care	Use and care for hand held power tools					
SGB NAME			ABET BAN	D PROVIDER NAM	ME.		
SGB Mining and Minerals		Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	, Engineering a	nd Technology		and Extraction			
UNIT STAND	ARD CODE	UNIT STANL	DARD 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.



UNIT STANDARD:

111

Adjust wheel alignment on a self-propelled mobile machine

SAQA US II		INIT STANDARD TITLE					
115682	Adjust wheel a	Adjust wheel alignment on a self-propelled mobile machine					
SGB NAME			ABET BANK)	PROVIDER NAME		
SGB Mining and Minerals		Undefined					
FIELD DES	CRIPTION				SCRIPTION		
Manufacturii	ng, Engineering a	nd Technology	Fabrication	n and	Extraction		
UNIT STAN	DARD CODE	UNIT STANI	DARD TYPE	NG	F LEVEL	CREDITS	
MET-FBE-0-SGB MM Regular			Lev	vel 3	4		

Specific Outcomes:

SPECIFIC OUTCOME 1

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

SPECIFIC OUTCOME 2

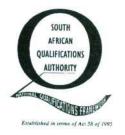
Prepare to adjust wheel alignment.

SPECIFIC OUTCOME 3

Adjust wheel alignment.

SPECIFIC OUTCOME 4

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



UNIT STANDARD:

112

Apply elementary calculations of mass and force to strata control

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115734	Apply element	Apply elementary calculations of mass and force to strata control						
SGB NAME			ABET BANK		DER NAME			
SGB Mining and Minerals		Undefined						
FIELD DESC	RIPTION		SUBFIELD	DESCRIPT	ION			
Manufacturing	g, Engineering a	nd Technology		and Extracti				
UNIT STAND	ARD CODE	UNIT STANL	DARD TYPE	NQF LEVE	L	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.



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 STANDA						
115781	Apply lockout and earthing procedures on an overvoltage up to 33kV			overhead power distribu	tion line operating at a		
SGB NAME			ABET BANK	PROVIDER NAME			
SGB Mining a	nd Minerals		Undefined				
FIELD DESC	RIPTION			DESCRIPTION			
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STAND	TANDARD CODE UNIT STAND		DARD 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.



UNIT STANDARD:

114

Apply the risk assessment process to rock related hazards

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE					
115646		Apply the risk assessment process to rock related hazards					
SGB NAME			ABET BAN		/IDER NAME		
SGB Mining and Minerals			Undefined		, NOTICE NAME		
FIELD DESC	RIPTION		SUBFIELD	DESCRIP	PTION	100000000000000000000000000000000000000	
Manufacturing	g, Engineering a	nd Technology	Fabrication				
UNIT STAND		UNIT STAND	ARD TYPE	NQF LEV	/EL	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

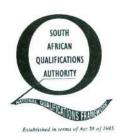
Demonstrate the ability to implement appropriate controls.

SPECIFIC OUTCOME 4

Demonstrate ability to communicate recognised hazards and associated risks.

SPECIFIC OUTCOME 5

Demonstrate ability to monitor the risk.



UNIT STANDARD:

115

Blend platinum group metal liquors

SAQA US ID		UNIT STANDARD TITLE					
115566	Blend platinum	Blend platinum group metal liquors					
SGB NAME			ABET BAND	PROVIDER NAME			
SGB Mining and Minerals		Undefined					
FIELD DESC	CRIPTION		SUBFIELD	DESCRIPTION			
Manufacturin	g, Engineering a	nd Technology	Fabrication	and Extraction			
	DARD CODE	UNIT STANL	DARD 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

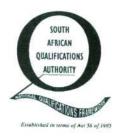
Prepare to blend liquors.

SPECIFIC OUTCOME 3

Blend liquors.

SPECIFIC OUTCOME 4

Complete the duties pertaining to the blending process.



UNIT STANDARD:

116

Butt-weld a pipe in position

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE					
115745	Butt-weld a pi	Butt-weld a pipe in position					
SGB NAME			ABET BAN	D PROVIDER NAM	F		
SGB Mining and Minerals			Undefined				
FIELD DESC	RIPTION		SUBFIEL	DESCRIPTION			
Manufacturing	, Engineering a	nd Technology		and Extraction			
UNIT STAND	ARD CODE	UNIT STANL	DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-SGB MM Regular		AND THE PERSON NAMED IN COLUMN TO PARTY OF THE PERSON NAM	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.



UNIT STANDARD:

117

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

SAQA US ID	UNIT STANDA	JNIT STANDARD TITLE					
115782	Carry out a clo	Carry out a close electrical inspection on electrical powered surface mining machines					
SGB NAME			ABET BANK	PROVIDER NAM	IE		
SGB Mining and Minerals			Undefined				
FIELD DESC	RIPTION			DESCRIPTION			
Manufacturin	g, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STAND	ARD CODE	UNIT STAN	DARD 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.



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 BANK	PROVIDER NAME				
SGB Mining and Minerals		Undefined		The state of the s				
FIELD DESC	RIPTION	7.7	SUBFIELD DESCRIPTION					
Manufacturin	g, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD 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.



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 Carry out a detailed electrical inspection on a charging system for cap lamps, gas testing and monitoring devices								
115554									
SGB NAME			ABET BANK	PROVIDER NAME					
SGB Mining and Minerals			Undefined						
FIELD DESCR	RIPTION		SUBFIELL	DESCRIPTION					
Manufacturing,	, Engineering a	nd Technology	Fabrication	and Extraction	· ·				
UNIT STANDARD CODE UNIT STAND		DARD 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.



UNIT STANDARD:

120

Carry out a detailed electrical inspection on a drill rig

SAQA US ID		UNIT STANDARD TITLE						
115506	Carry out a de	Carry out a detailed electrical inspection on a drill rig						
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals		Undefined						
FIELD DESC	RIPTION		SUBFIELL	DESCRIPTION				
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD 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

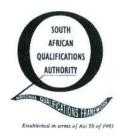
Prepare to inspect the drill rig.

SPECIFIC OUTCOME 3

Inspect the drill rig.

SPECIFIC OUTCOME 4

Test the drill rig and prepare for operation.



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 BAN	ABET BAND PROVIDER NAME				
SGB Mining and Minerals			Undefined					
FIELD DESC	RIPTION	300000000000000000000000000000000000000	SUBFIELI	D DES	SCRIPTION			
Manufacturing	, Engineering a	nd Technology	Fabrication	n and	Extraction			
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQ	F LEVEL	CREDITS			
MET-FBE-0-SGB MM Regular		CONSCIENCE OF STREET	Lev	el 3	4			

Specific Outcomes:

SPECIFIC OUTCOME 1

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

SPECIFIC OUTCOME 2

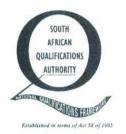
Prepare to inspect the refrigeration plant.

SPECIFIC OUTCOME 3

Inspect the refrigeration plant.

SPECIFIC OUTCOME 4

Test the refrigeration plant and prepare for operation.



UNIT STANDARD:

122

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

			The second secon	A Description of the second second					
SAQA US ID	UNIT STAND	UNIT STANDARD TITLE							
115512	Carry out a detailed electrical inspection on an air comprssor system higher than 5000 cubic metres								
SGB NAME			ABET BANK	PROVIDER NAME					
SGB Mining a	nd Minerals		Undefined						
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION					
Manufacturing	, Engineering a	nd Technology	Fabrication	Fabrication and Extraction					
UNIT STANDARD CODE UNIT STAN		DARD 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

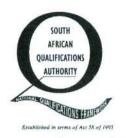
Prepare to inspect the air compressor system.

SPECIFIC OUTCOME 3

Inspect the air compressor system.

SPECIFIC OUTCOME 4

Test the air compressor system and prepare for operation.



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 BANK	PROVIDER NAME	E			
SGB Mining and Minerals			Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-S	GB MM	Regular		Level 3	3			

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to a detailed electrical inspection.

SPECIFIC OUTCOME 2

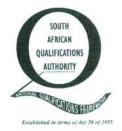
Prepare to inspect the machine.

SPECIFIC OUTCOME 3

Inspect the machine.

SPECIFIC OUTCOME 4

Test the machine and prepare for operation.



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 BANK	PROVIDER NAME	=		
SGB Mining and Minerals			Undefined				
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STANDARD CODE UNIT STAND		DARD 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.



UNIT STANDARD:

125

Carry out a detailed electrical inspection on an emergency power plant

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE							
115525	Carry out a detailed electrical inspection on an emergency power plant								
SGB NAME SGB Mining and Minerals			ABET BANK	0 1	PROVIDER NAME				
			Undefined						
FIELD DESC	RIPTION		SUBFIELD	DES	SCRIPTION				
Manufacturin	g, Engineering ar	nd Technology	Fabrication	and	Extraction				
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQ	F LEVEL	CREDITS				
MET-FBE-0-SGB MM Regular			Lev	el 3	2				

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to inspecting an emergency power plant.

SPECIFIC OUTCOME 2

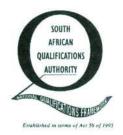
Prepare to inspect the emergency power plant.

SPECIFIC OUTCOME 3

Inspect the emergency power plant.

SPECIFIC OUTCOME 4

Test the emergency power plant.



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 BANK	PROVIDER NAME				
SGB Mining and Minerals			Undefined		-			
FIELD DESC	RIPTION	THE SHOW WE WILL SHOW THE SHOW	SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAN		DARD 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.



UNIT STANDARD:

127

Carry out a detailed electrical inspection on an overhead crane

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE							
115511	Carry out a detailed electrical inspection on an overhead crane								
SGB NAME			ABET BANK	PROVIDER NAM	E				
SGB Mining a	nd Minerals		Undefined	Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION					
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction					
UNIT STANDARD CODE UNIT STAN		DARD 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.



UNIT STANDARD:

128

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

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE							
115546	Carry out a detailed electrical inspection on an underground coal mining production machine								
SGB NAME			ABET BANK	PROVIDER NAM	ΙΕ				
SGB Mining and Minerals			Undefined						
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION					
Manufacturing	, Engineering ar	nd Technology	Fabrication	and Extraction					
UNIT STANDARD CODE UNIT STAND		DARD 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.



UNIT STANDARD:

129

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

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE							
115502	Carry out a de	Carry out a detailed inspection on a high voltage transformer and ancillary equipment							
SGB NAME			ABET BANK	PROVIDER NAM	ΙE				
SGB Mining and Minerals			Undefined						
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION					
Manufacturin	g, Engineering ar	nd Technology	Fabrication	and Extraction					
UNIT STANDARD CODE UNIT STAND		DARD 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

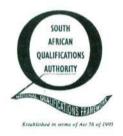
Prepare to inspect a high voltage transformer and ancillary equipment.

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.



UNIT STANDARD:

130

Carry out an installation test on low voltage installation

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115787	Carry out an installation test on low voltage installation							
SGB NAME			ABET BANK	PROVIDER NAM	E			
SGB Mining and Minerals			d Minerals Undefined		7-11-11-11-11-11-11-11-11-11-11-11-11-11			
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-S	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.



UNIT STANDARD:

131

Co-ordinate drilling and blasting operations

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115615	Co-ordinate dri	Co-ordinate drilling and blasting operations						
SGB NAME			ABET BAND	PROVIDER NAM	E			
SGB Mining and Minerals			Undefined					
FIELD DESC	CRIPTION		SUBFIELD	DESCRIPTION				
Manufacturin	ig, Engineering ar	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		ARD 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

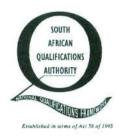
Evaluate blasting techniques and options.

SPECIFIC OUTCOME 4

Select appropriate blasting technique.

SPECIFIC OUTCOME 5

Monitor and evaluate blasting performance.



UNIT STANDARD:

132

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

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115694	Co-ordinate lo	Co-ordinate loading and hauling operations in an open pit mine						
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals			Undefined					
FIELD DESC	RIPTION		SUBFIELL	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-S	GB 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.



UNIT STANDARD:

133

Comply with organisational and work ethics within a surface mining context

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115661	Comply with o	Comply with organisational and work ethics within a surface mining context						
SGB NAME A			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals			Minerals Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION	2011-110-110-1-0-1			
Manufacturing	g, Engineering a	nd Technology	Fabrication	Fabrication and Extraction				
UNIT STAND	ARD CODE	UNIT STANI	DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	GB 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.



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 SGB Mining and Minerals			ABET BANK	PROVIDER NAME			
			Undefined				
FIELD DESCR	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	GB 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.



UNIT STANDARD:

135

Conduct elementary in situ tests of support installation quality

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE					
115551	Conduct eleme	Conduct elementary in situ tests of support installation quality					
OCD WAILE			ABET BANK	PROVIDER NAME	E ANGEL		
			Undefined				
FIELD DESC	CRIPTION		SUBFIELL	SUBFIELD DESCRIPTION			
Manufacturin	g, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STANDARD CODE UNIT STAND		DARD 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

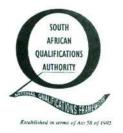
Demonstrate understanding of the basic in situ support quality testing methods available.

SPECIFIC OUTCOME 3

Conduct elementary in situ tests of support quality.

SPECIFIC OUTCOME 4

Communicate the results of the tests.



UNIT STANDARD:

136

Connect a single phase motor

SAQA US ID	UNIT STANDARD TITLE						
115548	Connect a single phase motor						
SGB NAME SGB Mining and Minerals			ABET BAN	PROVIDER NAME			
			Undefined				
FIELD DESCI	RIPTION		SUBFIELI	DESCRIPTION			
Manufacturing	, Engineering a	nd Technology		and Extraction	***		
UNIT STAND	ARD CODE	UNIT STANI	DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	GB MM	Regular		Level 3	4		
					1		

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.



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 BANK	PROVIDER NAM	E			
SGB Mining and Minerals			Undefined					
FIELD DESC	RIPTION		SUBFIELD					
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	NIT STANDARD CODE UNIT STANDAR		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	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.



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					
			ABET BAND	PROVIDER NAME		
SGB Mining and Minerals			Undefined			
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION		
Manufacturing	, Engineering a	nd Technology	Fabrication	Fabrication and Extraction		
UNIT STAND	ARD CODE	UNIT STANL	DARD TYPE	NQF LEVEL	CREDITS	
MET-FBE-0-S	GB 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.



UNIT STANDARD:

139

Demonstrate a basic understanding of the causes of falls of ground

SAQA US IL	UNIT STANDA	UNIT STANDARD TITLE						
115750	Demonstrate a	Demonstrate a basic understanding of the causes of falls of ground						
SGB NAME AB			ABET BANK	PROVIDER NAM	E			
SGB Mining and Minerals			Undefined					
FIELD DESC	CRIPTION		SUBFIELD	DESCRIPTION				
Manufacturir	ng, Engineering ar	nd Technology	Fabrication	Fabrication and Extraction				
UNIT STAN	DARD CODE	DDE 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

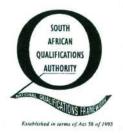
Demonstrate the ability to identify potential falls of ground.

SPECIFIC OUTCOME 3

Demonstrate knowledge of appropriate remedial measures.

SPECIFIC OUTCOME 4

Record and report potential falls of ground.



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 SGB Mining and Minerals			ABET BANK	PROVIDER NAM	E		
			Undefined				
FIELD DESCH	RIPTION		SUBFIELD DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STAND	ARD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS		
MET-FBE-0-S	GB 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.



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 SGB Mining and Minerals			ABET BANK	PROVIDER NAME	E			
			Undefined					
FIELD DESCI	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-S	GB MM	Regular		Level 3	3			

Specific Outcomes:

SPECIFIC OUTCOME 1

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

SPECIFIC OUTCOME 2

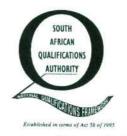
Demonstrate knowledge of strata control hazards associated with incorrect drilling practices.

SPECIFIC OUTCOME 3

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

SPECIFIC OUTCOME 4

Report the hazards to relevant personnel.



UNIT STANDARD:

142

Demonstrate an elementary understanding of pillar characteristics, behaviour and function

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE								
115746	Demonstrate an elementary understanding of pillar characteristics, behaviour and function									
SGB NAME SGB Mining and Minerals				ABET BAND PROVIDER NAME						
			Undefined							
FIELD DESCR	RIPTION		SUBFIELD	DESCRIPTION	ON					
Manufacturing	, Engineering a	nd Technology		and Extractio						
UNIT STANDA	ARD CODE	UNIT STANL	DARD TYPE	NQF LEVEL	CREDITS					
MET-FBE-0-S	MET-FBE-0-SGB MM Regular		100-1500	Level 3	3					

Specific Outcomes:

SPECIFIC OUTCOME 1

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

SPECIFIC OUTCOME 2

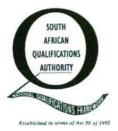
Demonstrate elementary knowledge of pillar characteristics and behaviour.

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.



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 SGB Mining and Minerals			ABET BANK	PROVIDE	ER NAME		
			Undefined				
FIELD DESC	RIPTION		SUBFIELL	DESCRIPTION	NC		
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction	n		
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	. CRE	DITS		
MET-FBE-0-SGB MM Regular			Level 3	2			

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate elementary knowledge of support principles.

SPECIFIC OUTCOME 2

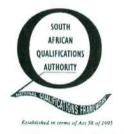
Demonstrate elementary knowledge of support units and their functions.

SPECIFIC OUTCOME 3

Demonstrate elementary understanding of the support unit behaviour.

SPECIFIC OUTCOME 4

Demonstrate elementary understanding of support unit installation.



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 SGB Mining and Minerals			ABET BAN	D PROVIDER NAME				
			Undefined					
FIELD DESCR	RIPTION		SUBFIELD DESCRIPTION					
Manufacturing	, Engineering a	nd Technology	Fabrication and Extraction					
UNIT STANDARD CODE UNIT STAND		DARD 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.



UNIT STANDARD:

145

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

SAQA US ID	UNIT STANDARD TITLE								
115634	Demonstrate a equipment	Demonstrate an understanding of basic lubrication principles on underground coal mine equipment							
SGB NAME			ABET BANK	PROVIDER NAME					
SGB Mining a	SGB Mining and Minerals								
FIELD DESCI	RIPTION		SUBFIELD DESCRIPTION						
Manufacturing	Manufacturing, Engineering and Technology			and Extraction					
UNIT STANDARD CODE UNIT STAND		DARD 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.



UNIT STANDARD:

146

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

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE							
115681	Demonstrate an understanding of coaching individuals within a surface mining work place								
SGB NAME			ABET BAN						
			Undefined						
FIELD DESCI	RIPTION		SUBFIELD	DESCRIPTION					
Manufacturing	, Engineering a	nd Technology		and Extraction					
UNIT STAND	ARD CODE	UNIT STANI	DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-S	-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.



UNIT STANDARD:

147

Demonstrate an understanding of excavation stability in a rock pass

SAQA US ID	UNIT STANDARD TITLE Demonstrate an understanding of excavation stability in a rock pass						
115545							
SGB NAME ABET BANK			PROVIDER NAME				
SGB Mining and Minerals			Undefined				
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing, Engineering and Technology			Fabrication	Fabrication and Extraction			
UNIT STANDARD CODE UNIT STANI		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	GB 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.



UNIT STANDARD:

148

Demonstrate an understanding of power reticulation system in a surface mine

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE							
115623	Demonstrate an understanding of power reticulation system in a surface mine								
SGB NAME SGB Mining and Minerals			ABET BAN		PROVIDER NAME				
			Undefined	\neg					
FIELD DESCI	RIPTION		SUBFIEL	DES	CRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication						
UNIT STANDA	ARD CODE	UNIT STANL	DARD TYPE	NQF	LEVEL	CREDITS			
MET-FBE-0-SGB MM Regular			Level 3		6				

Specific Outcomes:

SPECIFIC OUTCOME 1

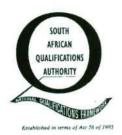
Explain the construction of road and fire breaks.

SPECIFIC OUTCOME 2

Explain the transporting of machines under power lines.

SPECIFIC OUTCOME 3

Explain the stopping of machines under power lines.



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 BANK	PROVIDER NAME				
SGB Mining and Minerals		Undefined						
FIELD DESCI	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing, Engineering and Technology		Fabrication	and Extraction					
UNIT STAND	ARD CODE	UNIT STAN	DARD 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

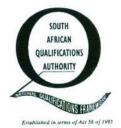
Demonstrate the ability to read a mine plan.

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.



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 BANK	PROVIDER NAME	Ŧ			
SGB Mining and Minerals		Undefined						
FIELD DESC	RIPTION	4	SUBFIELD DESCRIPTION					
Manufacturing, Engineering and Technology		Fabrication	and Extraction					
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-SGB MM Regular			Level 3	1				

Specific Outcomes:

SPECIFIC OUTCOME 1

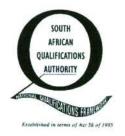
Demonstrate knowledge and understanding of the mine-specific minerals being mined.

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.



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 Demonstrate elementary knowledge and understanding of multi-reef / seam environments to achieve excavation stability with support							
115670								
SGB NAME	- 11		ABET BAN	D PROVIDER NAME				
SGB Mining and Minerals			Undefined					
FIELD DESCR	RIPTION		SUBFIEL	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	n and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD 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.



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 SGB Mining and Minerals			ABET BANK	PROVIDER NAME				
			Undefined					
FIELD DESC	RIPTION		SUBFIELD	BFIELD DESCRIPTION				
Manufacturing, Engineering and Technology			Fabrication	Fabrication and Extraction				
UNIT STAND	ARD CODE	UNIT STANI	DARD 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.



UNIT STANDARD:

153

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

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE							
115673	Demonstrate elementary knowledge and understanding of rockburst prone mining operations to achieve excavation stability with support								
SGB NAME SGB Mining and Minerals			ABET BAN	D PROVIDER NAME	(14)				
			nerals Undefined						
FIELD DESC	RIPTION		SUBFIEL						
Manufacturing	, Engineering a	nd Technology	Fabrication	n and Extraction					
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS					
MET-FBE-0-SGB MM Regular			Level 3	3					

Specific Outcomes:

SPECIFIC OUTCOME 1

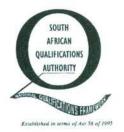
Demonstrate elementary knowledge of rockbursts.

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.



UNIT STANDARD:

154

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

UNIT STANDARD TITLE						
Demonstrate knowledge and basic understanding of the effect of high mining heights on artificial support installation and effectiveness						
SGB NAME			PROVIDER NAME			
SGB Mining and Minerals						
RIPTION		SUBFIELD DESCRIPTION				
, Engineering a	nd Technology	Fabrication	Fabrication and Extraction			
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS		
GB MM	Regular	A COURT OF THE	Level 3	2		
	Demonstrate kartificial supported Minerals RIPTION I, Engineering a	artificial support installation and minerals RIPTION , Engineering and Technology ARD CODE UNIT STANL	Demonstrate knowledge and basic understand artificial support installation and effectiveness ABET BAND and Minerals Undefined SUBFIELD Engineering and Technology Fabrication ARD CODE UNIT STANDARD TYPE	Demonstrate knowledge and basic understanding of the effect of high artificial support installation and effectiveness ABET BAND PROVIDER NAME ABET BAND Undefined Undefined SUBFIELD DESCRIPTION Engineering and Technology Fabrication and Extraction ARD CODE UNIT STANDARD TYPE NQF LEVEL		

Specific Outcomes:

SPECIFIC OUTCOME 1

Describe the environments associated with high mining heights.

SPECIFIC OUTCOME 2

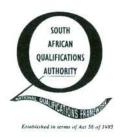
Demonstrate an understanding of the influence of support height on desired support performance.

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.



UNIT STANDARD:

155

Demonstrate knowledge and understanding of strata control

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115749	Demonstrate I	Demonstrate knowledge and understanding of strata control						
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals			Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	g, Engineering a	nd Technology	Fabrication	Fabrication and Extraction				
UNIT STAND	ANDARD CODE UNIT STANDAR		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	SGB MM	Regular		Level 3	2			

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge of basic rock mechanics issues.

SPECIFIC OUTCOME 2

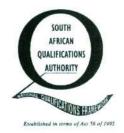
Demonstrate basic knowledge of the factors influencing the selection of stope support systems.

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.



UNIT STANDARD:

156

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

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115622	Demonstrate knowledge for the maintenance and construction of haul, access and service roads							
SGB NAME			ABET BANK	PROVIDER NAM	E			
SGB Mining and Minerals		Undefined						
FIELD DESCI	RIPTION		SUBFIELD DESCRIPTION					
Manufacturing	, Engineering ar	nd Technology	Fabrication	Fabrication and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-S	GB MM Regular			Level 3	24			

Specific Outcomes:

SPECIFIC OUTCOME 1

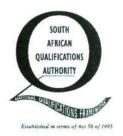
Demonstrate ability of planning and preparing for maintenance.

SPECIFIC OUTCOME 2

Demonstrate the conducting of maintenance.

SPECIFIC OUTCOME 3

Demonstrate the monitoring and finalising of work procedures.



UNIT STANDARD:

157

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

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115659	Demonstrate t	Demonstrate the ability to ensure that surface mining production targets are reached						
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals		Undefined						
FIELD DESCI	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	DE UNIT STANDARD TYPE		NQF LEVEL	CREDITS			
MET-FBE-0-S	GB MM	Regular		Level 3	3			

Specific Outcomes:

SPECIFIC OUTCOME 1

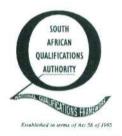
Establish role and performance requirements for each staff member.

SPECIFIC OUTCOME 2

Evaluate staff members against performance requirements.

SPECIFIC OUTCOME 3

Coach staff members to improve performance to reach set targets.



UNIT STANDARD:

158

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

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE					
115600	Demonstrate the co-ordination of a conveyor system operations in an underground coal mine						
SGB NAME			ABET BAND PROVIDER NAME		E		
SGB Mining and Minerals			Undefined				
FIELD DESCH	RIPTION		SUBFIELL	DESCRIPTION			
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	GB 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

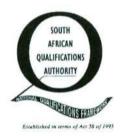
Demonstrate an understanding of the maintenance phase of a conveyor system.

SPECIFIC OUTCOME 4

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

SPECIFIC OUTCOME 5

Demonstrate teamwork.



UNIT STANDARD:

159

Demonstrate understanding of the effects of brows on excavation stability

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115552	Demonstrate understanding of the effects of brows on excavation stability							
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals			Undefined					
FIELD DESCI	RIPTION		SUBFIELD DESCRIPTION					
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction	The state of the s			
UNIT STANDARD CODE UNIT STANDARD T		OARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-S	GB 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

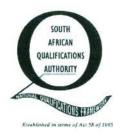
Describe factors influencing the choice of brow support.

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.



UNIT STANDARD:

160

Describe the effect of mining dimension on excavation stability

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE					
115686	Describe the e	Describe the effect of mining dimension on excavation stability					
SGB NAME			ABET BANK	PROVIDER NAM	E		
SGB Mining and Minerals		Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	g, Engineering a	nd Technology	Fabrication	Fabrication and Extraction			
UNIT STAND	ARD CODE	UNIT STANI	DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	SGB MM	Regular		Level 3	3		

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate understanding of relationship between frequency of exposed geological discontinuities.

SPECIFIC OUTCOME 2

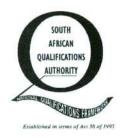
Demonstrate an understanding of the stress related effects of different sized excavations.

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.



UNIT STANDARD:

161

Examine and maintain mine safety in a surface mining context

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115671	Examine and	Examine and maintain mine safety in a surface mining context						
SGB NAME			ABET BANK	PROVIDER NAME	=			
SGB Mining and Minerals		Undefined						
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	UNIT STAN	DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	GB MM	Regular		Level 3	9			

Specific Outcomes:

SPECIFIC OUTCOME 1

Maintain familiarity with operational and safety activities.

SPECIFIC OUTCOME 2

Examine operations.



UNIT STANDARD:

162

Examine and make safe blasted quarry excavations

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE					
115535	Examine and make safe blasted quarry excavations						
SGB NAME			ABET BANK	PROVIDER NAME			
SGB Mining and Minerals			d Minerals Undefined				
FIELD DESCI	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	, Engineering ar	nd Technology	Fabrication	Fabrication and Extraction			
UNIT STANDARD CODE UNIT STANDA		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	GB MM	Regular		Level 3	5		

Specific Outcomes:

SPECIFIC OUTCOME 1

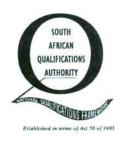
Demonstrate an understanding of significant risk of falls of ground in quarries.

SPECIFIC OUTCOME 2

Examine blasted quarries plus their dumps and stockpiles.

SPECIFIC OUTCOME 3

Declare safe blasted quarries and their dumps and stockpiles.



UNIT STANDARD:

163

Examine and make safe non-blasted quarry excavations

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE					
115507	Examine and r	nake safe non-bl	asted quarry ex	cavations			
SGB NAME			ABET BANK	PROVIDER NAME			
SGB Mining and Minerals		Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	, Engineering ar	nd Technology	Fabrication	and Extraction			
UNIT STAND	ARD CODE	UNIT STANI	DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	GB 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.



UNIT STANDARD:

164

Fabricate a launder

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115740	Fabricate a la	Fabricate a launder						
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals		Undefined						
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	UNIT STANI	DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	GB MM	Regular		Level 3	5			

Specific Outcomes:

SPECIFIC OUTCOME 1

Explain the factors critical to fabricate a launder.

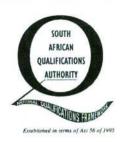
SPECIFIC OUTCOME 2

Prepare to fabricate a launder.

SPECIFIC OUTCOME 3

Fabricate a launder.

SPECIFIC OUTCOME 4



UNIT STANDARD:

165

Fabricate a spiral by means of triangulation

SAQA US ID	UNIT STANDA	JNIT STANDARD TITLE					
115744	Fabricate a spiral by means of triangulation						
SGB NAME		ABET BAND	PROVIDER NAME				
SGB Mining and Minerals		Undefined					
FIELD DESCI	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STAND	ARD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS		
MET-FBE-0-S	GB MM	Regular	81145	Level 3	5		

Specific Outcomes:

SPECIFIC OUTCOME 1

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

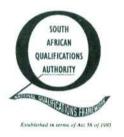
SPECIFIC OUTCOME 2

Prepare to fabricate a spiral by means of triangulation.

SPECIFIC OUTCOME 3

Fabricate a spiral by means of triangulation.

SPECIFIC OUTCOME 4



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 BAN	PROVIDER NAME		
SGB Mining and Minerals		Undefined				
FIELD DESCR	RIPTION		SUBFIELD DESCRIPTION			
Manufacturing	, Engineering a	nd Technology	Manufactu	Manufacturing and Assembly		
UNIT STANDA	ARD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS	
MET-MNA-0-S	GB 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



UNIT STANDARD:

167

Fabricate components by means of the radial line method

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE					
115571	Fabricate components by means of the radial line method						
SGB NAME SGB Mining and Minerals			ABET BAND	PROVIDER NAM	E		
			nd Minerals Undefined				
FIELD DESC	RIPTION		SUBFIELD DESCRIPTION				
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STANDARD CODE UNIT STAND		DARD 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.

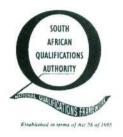
SPECIFIC OUTCOME 2

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



UNIT STANDARD:

168

Fabricate components by means of the triangulation method

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE					
115565	Fabricate com	Fabricate components by means of the triangulation method					
SGB NAME			ABET BANK	PROVIDER NAM	E		
SGB Mining and Minerals			Undefined				
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	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



UNIT STANDARD:

169

Fabricate rolled sections

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115699	Fabricate rolle	Fabricate rolled sections						
SGB NAME			ABET BAN	PROVIDER NAME				
SGB Mining and Minerals		Undefined						
FIELD DESC	CRIPTION		SUBFIEL					
Manufacturin	ng, Engineering a	nd Technology	Fabrication	n and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD 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.

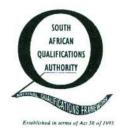
SPECIFIC OUTCOME 2

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



UNIT STANDARD:

170

Fault find a high voltage reticulation system

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE					
115599	Fault find a high voltage reticulation system						
SGB NAME SGB Mining and Minerals			ABET BAN	PROVIDER NAME	E		
			Undefined				
FIELD DESC	RIPTION		SUBFIELD				
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction	***************************************		
UNIT STAND	ARD CODE	E UNIT STANDARD 1		NQF LEVEL	CREDITS		
MET-FBE-0-S	GB 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.



UNIT STANDARD:

171

Fault find and repair a motor starter

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115515	Fault find and	Fault find and repair a motor starter						
SGB NAME ABE			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals		Undefined						
FIELD DESC	RIPTION	15//	SUBFIELD					
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	CODE UNIT STANDARD T		NQF LEVEL	CREDITS			
MET-FBE-0-S	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

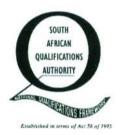
Prepare to fault find and repair the motor starter.

SPECIFIC OUTCOME 3

Fault find and repair the motor starter.

SPECIFIC OUTCOME 4

Prepare and test the starter for operation.



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 SGB Mining and Minerals			ABET BANK	PROVIDER NAME			
			d Minerals Undefined				
FIELD DESCI	RIPTION		SUBFIELD DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STAND	ARD CODE	UNIT STANI	DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	GB 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

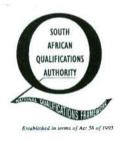
Prepare to fault find and repair the electrical system.

SPECIFIC OUTCOME 3

Fault find and repair the electrical system.

SPECIFIC OUTCOME 4

Prepare and test the machine for operation.



UNIT STANDARD:

173

Fault find and repair the electrical system of an overhead crane

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE					
115534	Fault find and	Fault find and repair the electrical system of an overhead crane					
SGB NAME AL			ABET BAND	PROVIDER NAME	E		
SGB Mining and Minerals			Undefined				
FIELD DESC	CRIPTION		SUBFIELD	The sales was the sales and the sales are th			
Manufacturin	g, Engineering a	nd Technology	Fabrication	Fabrication and Extraction			
UNIT STANDARD CODE UNIT STANDAR		DARD 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.



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 DESC	RIPTION		SUBFIELD	DESCRIPTION		
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction		
UNIT STANDA	INIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS	
MET-FBE-0-S	GB 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.



UNIT STANDARD:

175

Fault find and restore electronic control system

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE					
115577	Fault find and restore electronic control system						
SGB NAME			ABET BAND	PROVIDER NAME			
SGB Mining and Minerals		Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	g, Engineering ar	nd Technology	Fabrication	and Extraction			
UNIT STAND	ARD CODE	CODE UNIT STANDARD T		NQF LEVEL	CREDITS		
MET-FBE-0-S	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

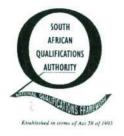
Prepare to fault find and restore the electronic control system.

SPECIFIC OUTCOME 3

Fault find and restore the electronic control system.

SPECIFIC OUTCOME 4

Prepare and test the system for operation.



UNIT STANDARD:

176

Grind material by means of a Palla mill

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE					
115664	Grind material by means of a Palla mill						
SGB NAME			ABET BAN	D PROVIDER NAME			
SGB Mining and Minerals			Undefined				
FIELD DESCI	RIPTION		SUBFIELI	DESCRIPTION			
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	GB 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

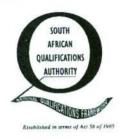
Prepare to grind material.

SPECIFIC OUTCOME 4

Grind material.

SPECIFIC OUTCOME 5

Complete the duties pertaining to the grinding process.



UNIT STANDARD:

177

Grind material by means of a pebble mill

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE					
115625	Grind material by means of a pebble mill						
SGB NAME			ABET BANK	PROVIDER NAME			
SGB Mining and Minerals			Undefined				
FIELD DESC	RIPTION		SUBFIELD DESCRIPTION				
Manufacturin	g, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STAND	INIT STANDARD CODE UNIT STANDAR		DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	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.



UNIT STANDARD:

178

Grind material by means of a tube mill

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115621	Grind material by means of a tube mill							
SGB NAME			ABET BAN	ID PROVIDER NAME				
SGB Mining a	nd Minerals		Undefined					
FIELD DESCI	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	Fabrication and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-SGB MM Regular			Level 3	10				
				Water Country	110			

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.



UNIT STANDARD:

179

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

SAQA US IE		UNIT STANDARD TITLE						
115758	Identify and ev	Identify and evaluate the effect of seismic activity on the rock mass and support units						
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals			Undefined					
FIELD DESC	CRIPTION		SUBFIELL	DESCRIPTION				
Manufacturir	ng, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-		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.



UNIT STANDARD:

180

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

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115597	Increase redox potential of hydrochloric acid by means of chlorine gas absorption							
SGB NAME			ABET BANK	PROVIDER NAME	E			
SGB Mining and Minerals			Undefined					
FIELD DESC	RIPTION		SUBFIELL	DESCRIPTION				
Manufacturing	g, Engineering ar	nd Technology	Fabrication	Fabrication and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD 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.



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 BANK	PROVIDER NAME			
SGB Mining and Minerals		Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	g, Engineering ar	nd Technology	Fabrication	and Extraction			
UNIT STANDARD CODE UNIT STAND MET-FBE-0-SGB MM Regular		DARD TYPE	NQF LEVEL	CREDITS			
			Level 3	2			

Specific Outcomes:

SPECIFIC OUTCOME 1

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

SPECIFIC OUTCOME 2

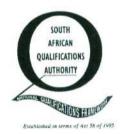
Prepare to inspect and maintain the overhead crane.

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.



UNIT STANDARD:

182

Inspect and test a presuure vessel

SAQA US II	D UNIT STANDA	UNIT STANDARD TITLE						
115695	Inspect and te	Inspect and test a presuure vessel						
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals			Undefined	Undefined				
FIELD DES	CRIPTION		SUBFIELD DESCRIPTION					
Manufacturi	ng, Engineering a	nd Technology	Fabrication	and Extraction	40			
UNIT STANDARD CODE UNIT STAND		DARD 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.



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 BAN	D PROVIDER NAME				
SGB Mining and Minerals			Undefined					
FIELD DESCR	RIPTION		SUBFIEL	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-S	GB MM	Regular		Level 3	3			
				1				

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.



UNIT STANDARD:

184

Install a battery on an uninterruptible power supply

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115544	Install a battery on an uninterruptible power supply							
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals			Undefined					
FIELD DESC	RIPTION	- Weight	SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD 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

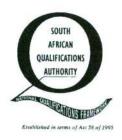
Prepare to install a battery on an uninterruptible power supply.

SPECIFIC OUTCOME 3

Install the battery.

SPECIFIC OUTCOME 4

Test the uninterruptible power supply and prepare for operation.



UNIT STANDARD:

185

Install a traction battery charging system in an underground mine

SAQA US ID	UNIT STANDARD TITLE Install a traction battery charging system in an underground mine							
115572								
SGB NAME			ABET BAN	PROVIDER NAME				
SGB Mining and Minerals			Undefined					
FIELD DESCI	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	Fabrication and Extraction				
UNIT STANDARD CODE UNIT STAN		DARD 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

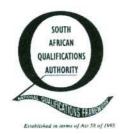
Prepare to install a traction battery charging system.

SPECIFIC OUTCOME 3

Install a traction battery charging system.

SPECIFIC OUTCOME 4

Test the installation and prepare for operation.



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 DESC	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	, Engineering a	nd Technology	Fabrication	Fabrication and Extraction			
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	T-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

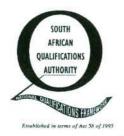
Prepare to interpret faults on a PLC system.

SPECIFIC OUTCOME 3

Interpret faults on the PLC system.

SPECIFIC OUTCOME 4

Complete the process and perform reporting duties.



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 SGB Mining and Minerals			ABET BANK	PROVIDER NAM	ИE			
			Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD 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

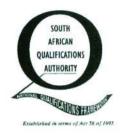
Prepare to join the metals horizontally, overhead and vertically by means of arc welding.

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.



UNIT STANDARD:

188

Layout and fabricate a structure

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE							
115697	Layout and fabricate a structure								
SGB NAME			ABET BAND	PROVIDER NAME					
SGB Mining and Minerals		Undefined							
FIELD DESC	RIPTION		SUBFIELD	SUBFIELD DESCRIPTION					
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction					
UNIT STANDARD CODE UNIT STAND		DARD 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.



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 SGB Mining and Minerals			ABET BANK	D	PROVIDER NAME			
			Undefined					
FIELD DESCR	RIPTION		SUBFIELD	D DE	SCRIPTION			
Manufacturing,	Engineering ar	nd Technology	Fabrication	n and	d Extraction			
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NG	OF LEVEL	CREDITS			
MET-FBE-0-SGB MM Regular			Le	vel 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.



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 BANK	PROVIDER NAME			
SGB Mining and Minerals		Undefined					
FIELD DESCH	RIPTION		SUBFIELL	DESCRIPTION			
Manufacturing	, Engineering and	Technology	Fabrication	and Extraction			
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	GB MM	Regular		Level 3	7		
MET-FBE-0-S					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.



UNIT STANDARD:

191

Manage effective employee relationships

SAQA US ID	UNIT STANDARD TITLE						
115628	Manage effective employee relationships						
SGB NAME AB			ABET BAND	PROVIDER NAME			
SGB Mining and Minerals		Undefined					
FIELD DESC	RIPTION		SUBFIELD DESCRIPTION				
Manufacturing	g, Engineering an	d Technology	Fabrication	and Extraction			
UNIT STAND	ARD CODE	UNIT STAN	DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	GB MM Regular			Level 3	2		

Specific Outcomes:

SPECIFIC OUTCOME 1

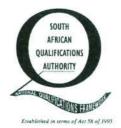
Gather, analyse, convey and receive information and ideas.

SPECIFIC OUTCOME 2

Develop trust and confidence.

SPECIFIC OUTCOME 3

Manage problems to achieve positive outcomes.



UNIT STANDARD:

192

Manage operations to achieve planned outcomes

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115676	Manage operations to achieve planned outcomes							
SGB NAME			ABET BANK	PROVIDER N	IAME			
SGB Mining a	nd Minerals	1000 10	Undefined		+			
FIELD DESCI	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering ar	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD 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.



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 BANK	PROVIDER NAME	-			
SGB Mining and Minerals		Undefined						
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	UNIT STAN	DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-SGB MM Regular			Level 3	24				

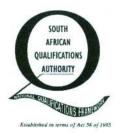
Specific Outcomes:

SPECIFIC OUTCOME 1

Plan and prepare for maintenance.

SPECIFIC OUTCOME 2

Conduct maintenance.



UNIT STANDARD:

194

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

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115691	Manually construct an outcrop plan of a geologically simple area from given data							
SGB NAME			ABET BANK	PROVIDER	NAME			
SGB Mining and Minerals			Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-SGB MM Regular		10000	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.



UNIT STANDARD:

195

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

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115626	Monitor mine operations in a control room of an underground coal mine							
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals			Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturin	g, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-S	FBE-0-SGB MM Regular			Level 3	8			

Specific Outcomes:

SPECIFIC OUTCOME 1

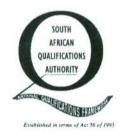
Prepare to monitor mine operations.

SPECIFIC OUTCOME 2

Monitor and control processes.

SPECIFIC OUTCOME 3

Record operational information.



UNIT STANDARD:

196

Overhaul a blower of a Detroit diesel engine

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE					
115729	Overhaul a blo	Overhaul a blower of a Detroit diesel engine					
SGB NAME			ABET BAN	PROVIDER NAME	E		
SGB Mining and Minerals		Undefined		******			
FIELD DESC	CRIPTION		SUBFIELL	DESCRIPTION			
Manufacturin	ng, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-	SGB MM	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

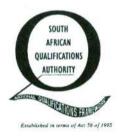
Prepare to overhaul a blower of Detroit diesel engine.

SPECIFIC OUTCOME 3

Overhaul a blower of a Detroit diesel engine.

SPECIFIC OUTCOME 4

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



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 BANK	PROVIDER NA	ME		
SGB Mining a	nd Minerals		Undefined				
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION	TOTAL MARKET		
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STANDARD CODE UNIT STAND		ARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	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

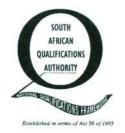
Prepare to overhaul a differential.

SPECIFIC OUTCOME 3

Overhaul the differential.

SPECIFIC OUTCOME 4

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



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 BANK	PROVIDER NAME			
SGB Mining and Minerals		Undefined					
FIELD DESCI	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	, Engineering ar	nd Technology	Fabrication	and Extraction			
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	GB MM	M 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.



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 BANK) PF	ROVIDER NAME	
SGB Mining and Minerals		Undefined				
FIELD DESC	RIPTION	The same was a same as a same a same as a same as a same as a same a same a same as a same as a	SUBFIELD	DESC	RIPTION	
Manufacturing	g, Engineering ar	nd Technology	Fabrication	and E	xtraction	
UNIT STANDARD CODE UNIT STAND		DARD 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.



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 BANK	PROVIDER NAME	And the state of t		
SGB Mining and Minerals		Undefined					
FIELD DESCR	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	, Engineering ar	nd Technology	Fabrication	and Extraction			
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	GB 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.



UNIT STANDARD:

201

Overhaul a turbo charger of a self-propelled mobile machine

SAQA US IL		UNIT STANDARD TITLE						
115757	Overhaul a tur	Overhaul a turbo charger of a self-propelled mobile machine						
SGB NAME			ABET BANK	PROVIDER N	AME			
SGB Mining	and Minerals		Undefined					
FIELD DES	CRIPTION		SUBFIELD					
Manufacturir	ig, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD 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

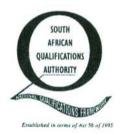
Prepare to overhaul a turbo charger.

SPECIFIC OUTCOME 3

Overhaul a turbo charger.

SPECIFIC OUTCOME 4

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



UNIT STANDARD:

202

Perform standard cement/lime industry wet chemical analysis

SAQA US ID	UNIT STAND	INIT STANDARD TITLE						
115540	Perform standard cement/lime industry wet chemical analysis							
SGB NAME SGB Mining and Minerals			ABET BANK	D F	PROVIDER NAME			
			Undefined					
FIELD DESCI	RIPTION		SUBFIELL	DES	CRIPTION			
Manufacturing	, Engineering a	nd Technology	Fabrication	n and	Extraction	****		
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQI	ELEVEL	CREDITS			
MET-FBE-0-S	ET-FBE-0-SGB MM Regular		1777 1812 1812	Leve	el 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.



UNIT STANDARD:

203

Process materials in a mobile screening plant

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115503	Process materials in a mobile screening plant							
SGB NAME			ABET BANK	PROVIDE	R NAME			
SGB Mining and Minerals			Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTIO	N			
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction	1			
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CR	EDITS			
MET-FBE-0-S	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.



UNIT STANDARD:

204

Produce aggregates in a crushing and screening plant

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE					
115559	Produce aggre	Produce aggregates in a crushing and screening plant					
SGB NAME			ABET BAN	PROVIDER NAME			
SGB Mining and Minerals			Undefined				
FIELD DESC	RIPTION		SUBFIELD DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	ET-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.



UNIT STANDARD:

205

Provide leadership in the workplace

SAQA US ID	UNIT STAND	INIT STANDARD TITLE						
115629	Provide leader	Provide leadership in the workplace						
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals		rals		d Minerals Undefined				
FIELD DESC	RIPTION SUBFIELD DESCRI			DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD 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.



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 BANK	PROVIDER NAME		
SGB Mining and Minerals			Undefined			
FIELD DESCI	RIPTION		SUBFIELD	DESCRIPTION		
Manufacturing	, Engineering a	nd Technology		and Extraction		
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-SGB MM Regular		CONTROL CONTRO	Level 3	10		

Specific Outcomes:

SOUTH
AFRICAN
QUALIFICATIONS

AUTHORITY

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.



UNIT STANDARD:

207

Read surface mining plans

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

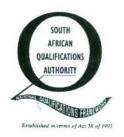
Specific Outcomes:

SPECIFIC OUTCOME 1

Read mining plans.

SPECIFIC OUTCOME 2

Explain theoretical and legal requirements of mine plans.



UNIT STANDARD:

208

Recognise, record and report hazards associated with geological discontinuities

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115667	Recognise, record and report hazards associated with geological discontinuities							
SGB NAME SGB Mining and Minerals			ABET BAN	PROVIDER NAME	**			
			Undefined					
FIELD DESCR	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD 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.



UNIT STANDARD:

209

Record geotechnical data and draw up a local geotechnical plan

SAQA US ID		UNIT STANDARD TITLE						
115549	Record geotec	Record geotechnical data and draw up a local geotechnical plan						
SGB NAME			ABET BAND	PROVIDER NAME				
SGB Mining and Minerals			Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-S	GB 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.



UNIT STANDARD:

210

Repair a detroit diesel allison (DDA) fuel system

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115770	Repair a detroit diesel allison (DDA) fuel system							
SGB NAME			ABET BAN	D PROVIDER NAM	IE .			
SGB Mining and Minerals			Undefined	*				
FIELD DESCI	RIPTION	3	SUBFIELI	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD 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.



UNIT STANDARD:

211

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

SAQA US ID		INIT STANDARD TITLE						
115737	Repair a powe	Repair a power assisted steering box of a self-propelled mobile machine						
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals		Undefined						
FIELD DESC	RIPTION	A A A A A A A A A A A A A A A A A A A	SUBFIELD DESCRIPTION					
Manufacturing	g, Engineering a	nd Technology	Fabrication	Fabrication and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD 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



UNIT STANDARD:

212

Repair a power shift transmission

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115748	Repair a power shift transmission							
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals			Undefined					
FIELD DESCI	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-SGB MM Regular			Level 3	5				
					The state of the s			

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.



UNIT STANDARD:

213

Repair a pressure timed (PT) fuel system

SAQA US ID	UNIT STANDARD TITLE							
115741	Repair a press	Repair a pressure timed (PT) fuel system						
SGB NAME			ABET BAND	PROVIDER NAME				
SGB Mining and Minerals		Undefined						
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD 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

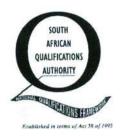
Prepare to repair a PT fuel system.

SPECIFIC OUTCOME 3

Repair a PT fuel system.

SPECIFIC OUTCOME 4

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



UNIT STANDARD:

214

Repair an orbital hydraulic steering valve

SAQA US ID	THE RESIDENCE OF THE PARTY OF T	UNIT STANDARD TITLE					
115768	Repair an orbi	Repair an orbital hydraulic steering valve					
SGB NAME			ABET BAN	PROVIDER NAME			
SGB Mining and Minerals		Undefined					
FIELD DESC	CRIPTION		SUBFIELD DESCRIPTION				
Manufacturin	ng, Engineering a	nd Technology	Fabricatio	and Extraction			
UNIT STAN	DARD CODE	UNIT STAN	DARD 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

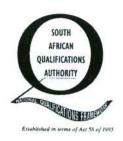
Prepare to repair an orbital hydraulic steering valve.

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.



UNIT STANDARD:

215

Repair hydraulic circuits of earth moving equipment

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE					
115721	Repair hydraulic circuits of earth moving equipment						
SGB NAME			ABET BAN	D PROVIDER NAM	IE		
SGB Mining and Minerals			Undefined				
FIELD DESC	RIPTION		SUBFIELD DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	Fabrication and Extraction			
UNIT STAND	ARD CODE	UNIT STAND	DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	GB 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.



UNIT STANDARD:

216

Repair the propel gearbox of a dragline

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115584	Repair the pro	Repair the propel gearbox of a dragline						
SGB NAME			ABET BAN	PROVIDER NAME				
SGB Mining and Minerals			Undefined					
FIELD DESC	CRIPTION		SUBFIEL	DESCRIPTION				
Manufacturin	g, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANE	DARD 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.



UNIT STANDARD:

217

Replace a propel cam on a dragline

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE					
115761	Replace a propel cam on a dragline						
SGB NAME			ABET BAN	PROVIDER NAME			
SGB Mining and Minerals			Undefined				
FIELD DESCR	RIPTION		SUBFIELL	DESCRIPTION			
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STANDA	ARD CODE	UNIT STANE	DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	GB 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

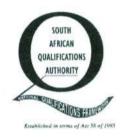
Prepare to replace the propel cam of a dragline.

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.



UNIT STANDARD:

218

Replace a sheave wheel in a headgear

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE					
115687	Replace a she	Replace a sheave wheel in a headgear					
SGB NAME			ABET BAND	PROVIDER NAME			
SGB Mining and Minerals			Undefined				
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STAND	ARD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS		
MET-FBE-0-S	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

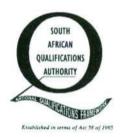
Prepare to remove the sheave wheel.

SPECIFIC OUTCOME 3

Replace the sheave wheel.

SPECIFIC OUTCOME 4

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



UNIT STANDARD:

219

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

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115636	Replace auto-	Replace auto-electrical wiring on a self-propelled mobile machine						
SGB NAME			ABET BANK	PROVIDE	R NAME			
SGB Mining and Minerals			Undefined					
FIELD DESC	RIPTION		SUBFIELD DESCRIPTION					
Manufacturin	g, Engineering a	nd Technology	Fabrication	and Extraction	1			
UNIT STAND	ARD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS			
MET-FBE-0-S	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.

UNIT STANDARD:

220

Replace mechanical components on the lubrication system of a dragline

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE					
115588	Replace mech	Replace mechanical components on the lubrication system of a dragline					
SGB NAME SGB Mining and Minerals			ABET BANK	PROVIDER NAME			
			Undefined				
FIELD DESC	RIPTION		SUBFIELL	SUBFIELD DESCRIPTION			
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STAND	ARD CODE	UNIT STANL	DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	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.



UNIT STANDARD:

221

Replace suspension and steering components on light vehicles

UNIT STANDA	UNIT STANDARD TITLE					
Replace suspension and steering components on light vehicles						
SGB NAME			PROVIDER NA	ME		
SGB Mining and Minerals						
RIPTION		SUBFIELD	DESCRIPTION	201.00		
Engineering ar	nd Technology	Fabrication	Fabrication and Extraction			
ARD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS		
GB MM	Regular		Level 3	4		
	Replace suspend Minerals RIPTION Engineering ar	nd Minerals RIPTION Engineering and Technology ARD CODE UNIT STAN	Replace suspension and steering components ABET BAND AND MINISTANDARD TYPE ARD CODE ARD CODE ARD CODE ARD CODE ARD CODE	Replace suspension and steering components on light vehicles ABET BAND PROVIDER NAME and Minerals Undefined RIPTION SUBFIELD DESCRIPTION Engineering and Technology Fabrication and Extraction ARD CODE UNIT STANDARD TYPE NQF LEVEL		

Specific Outcomes:

SPECIFIC OUTCOME 1

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

SPECIFIC OUTCOME 2

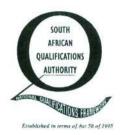
Prepare to replace the suspension and steering components on a light vehicle.

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.



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 BANK	PROVIDER NAME		
SGB Mining and Minerals			Undefined			
FIELD DESCI	RIPTION		SUBFIELD	DESCRIPTION		
Manufacturing	, Engineering a	nd Technology	Fabrication	Fabrication and Extraction		
UNIT STAND	ARD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS	
MET-FBE-0-S	GB MM	Regular		Level 3	3	
	OFFICE OF THE PERSON NAMED IN COLUMN 1			The state of the s	A CONTRACTOR OF THE PARTY OF TH	

Specific Outcomes:

SPECIFIC OUTCOME 1

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

SPECIFIC OUTCOME 2

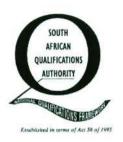
Prepare to replace suspension components.

SPECIFIC OUTCOME 3

Replace suspension components.

SPECIFIC OUTCOME 4

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



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 DESC	RIPTION		SUBFIELD	DESCRIPTION	DOMESTICAL TOTAL STREET, STREE		
Manufacturing	, Engineering ar	nd Technology	Fabrication	and Extraction			
UNIT STAND	ARD CODE	UNIT STAN	DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	GB 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.



UNIT STANDARD:

224

Supervise the relocation of machines

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE					
115650	Supervise the relocation of machines						
SGB NAME			ABET BAN	PROVIDER NAM	E		
SGB Mining and Minerals			Undefined				
FIELD DESC	RIPTION		SUBFIELL	DESCRIPTION			
Manufacturing	g, Engineering an	d Technology	Fabrication	and Extraction			
UNIT STAND	ARD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS		
MET-FBE-0-S	SGB MM	Regular		Level 3	3		

Specific Outcomes:

SPECIFIC OUTCOME 1

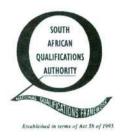
Plan to relocate machines.

SPECIFIC OUTCOME 2

Supervise relocation of machines.

SPECIFIC OUTCOME 3

Perform post relocation activities.



UNIT STANDARD:

225

Support drilling operations in a surface mining context

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE					
115643	Support drilling operations in a surface mining context						
SGB NAME			ABET BAND	PROVIDER NAME			
SGB Mining and Minerals			Undefined				
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STAND	ARD CODE	UNIT STANI	DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	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.



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 BANK	PROVIDER NAME		
SGB Mining and Minerals		Undefined				
FIELD DESCR	RIPTION		SUBFIELL	DESCRIPTION	The same and same	
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction		
UNIT STANDA	ARD CODE	ODE UNIT STANDARI		NQF LEVEL	CREDITS	
MET-FBE-0-S	GB 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

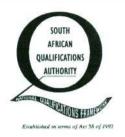
Prepare to terminate and connect the cable end.

SPECIFIC OUTCOME 3

Terminate and connect the cable end.

SPECIFIC OUTCOME 4

Prepare and test the equipment for operation.



UNIT STANDARD:

227

Test and locate a fault on a disconnected trailing cable

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115632	Test and locate a fault on a disconnected trailing cable							
SGB NAME SGB Mining and Minerals			ABET BANK	PROVIDER NAME				
			Undefined					
FIELD DESCI	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	TANDARD CODE UNIT STANDAR		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	GB 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

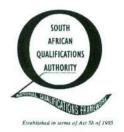
Prepare to test and locate the fault.

SPECIFIC OUTCOME 3

Test the cable and locate fault.

SPECIFIC OUTCOME 4

Complete the process.



UNIT STANDARD:

228

Use and care for electrical measuring, testing and recording instruments

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115743	Use and care for electrical measuring, testing and recording instruments							
SGB NAME SGB Mining and Minerals			ABET BANK	PROVIDER NAME	E			
			Undefined		Constraint of the Constraint o			
FIELD DESC	RIPTION		SUBFIELL	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	UNIT STANDARD		NQF LEVEL	CREDITS			
MET-FBE-0-S	GB 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.



UNIT STANDARD:

229

Use and care for high voltage electrical test instruments

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115644	Use and care for high voltage electrical test instruments							
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals		Undefined						
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	UNIT STAN	DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	GB 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.



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 BANK	PROVIDER NAME			
SGB Mining and Minerals			nerals Undefined				
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STAND	T STANDARD CODE UNIT STANDAR		DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	GB MM	Regular		Level 3	3		

Specific Outcomes:

SPECIFIC OUTCOME 1

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

SPECIFIC OUTCOME 2

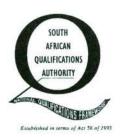
Prepare to work in bins and silos.

SPECIFIC OUTCOME 3

Work in mineral product bins and silos.

SPECIFIC OUTCOME 4

Finalise working in mineral product bins and silos.



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 BANK			PROVIDER NAME				
SGB Mining and Minerals		Undefined					
FIELD DESC	RIPTION		SUBFIELL	DESCRIPTION			
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STAND	ARD CODE	UNIT STAN	DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-S	GB 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.



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 BANK	PROVIDER NAME			
SGB Mining and Minerals			Undefined				
FIELD DESCI	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	, Engineering ar	nd Technology	Fabrication	and Extraction			
UNIT STANDARD CODE UNIT STANDAR		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	GB 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.



UNIT STANDARD:

233

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

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE							
115663	Demonstrate an understanding of legislation and compliance in the Mining and Minerals Sector								
SGB NAME	HANNAPAR W		ABET BAND	PROVIDER NAME					
SGB Mining and Minerals		Undefined							
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION					
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction					
UNIT STAND	ARD CODE	UNIT STAN	DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-S	GB 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.



UNIT STANDARD:

234

Demonstrate an understanding of metamorphic rocks

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE					
115708	Demonstrate a	Demonstrate an understanding of metamorphic rocks					
SGB NAME			ABET BAND	PROVIDER NAME			
SGB Mining and Minerals			Undefined				
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction	1967		
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	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

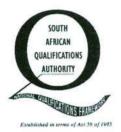
Demonstrate understanding of the principle characteristics of low grade metamorphic rocks rocks.

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.



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 DESCI	RIPTION	IPTION		DESCRIPTION			
Manufacturing	, Engineering an	nd Technology	Fabrication	Fabrication and Extraction			
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	GB 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.



UNIT STANDARD:

236

Demonstrate an understanding of sedimentary rocks

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115701	Demonstrate an understanding of sedimentary rocks							
SGB NAME			ABET BANK	PROVIDER NAM	E			
SGB Mining and Minerals			Undefined					
FIELD DESC	RIPTION		SUBFIELD DESCRIPTION					
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	UNIT STANDARD TY		NQF LEVEL	CREDITS			
MET-FBE-0-S	GB 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.



UNIT STANDARD:

237

Demonstrate an understanding of strata control systems

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE					
115594	Demonstrate a	Demonstrate an understanding of strata control systems					
SGB NAME			ABET BANK	PROVIDER NAME			
SGB Mining and Minerals		Undefined					
FIELD DESC	CRIPTION		SUBFIELD DESCRIPTION				
Manufacturin	g, Engineering a	nd Technology	Fabrication and Extraction				
UNIT STANDARD CODE UNIT STANDA		DARD 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

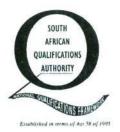
Demonstrate an understanding of the principles of roof support.

SPECIFIC OUTCOME 3

Demonstrate an understanding of relevant support categories.

SPECIFIC OUTCOME 4

Demonstrate an understanding of the principles of various support elements.



UNIT STANDARD:

238

Demonstrate an understanding of ventilation systems in an underground coal mine

SAQA US IL	UNIT STANDA	UNIT STANDARD TITLE						
115608	Demonstrate a	Demonstrate an understanding of ventilation systems in an underground coal mine						
SGB NAME			ABET BAN	PROVIDER NAM	E			
SGB Mining and Minerals		Undefined						
FIELD DESC	CRIPTION		SUBFIELI	DESCRIPTION				
Manufacturin	ng, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD 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.



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 BANK	PROVIDER NAME			
SGB Mining a	nd Minerals		Undefined				
FIELD DESCH	RIPTION	The state of the s	SUBFIELD	DESCRIPTION			
Manufacturing	, Engineering an	d Technology	Fabrication	Fabrication and Extraction			
UNIT STANDA	TANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-SGB MM Regular			Level 4	3			
					The state of the s		

Specific Outcomes:

SPECIFIC OUTCOME 1

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

SPECIFIC OUTCOME 2

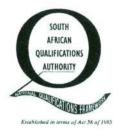
Demonstrate an elementary knowledge and understanding of stress in the mining environment.

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.



UNIT STANDARD:

242

Demonstrate the coordination of loading operations in an underground coal mine

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115585	Demonstrate t	Demonstrate the coordination of loading operations in an underground coal mine						
SGB NAME			ABET BAN	PROVIDER	NAME			
SGB Mining and Minerals			Undefined					
FIELD DESC	RIPTION		SUBFIELL	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	UNIT STANI	DARD 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.



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	<u> </u>		ABET BAND	PROVIDER NAME	:		
SGB Mining and Minerals		Undefined					
FIELD DESCI	RIPTION		SUBFIELD	DESCRIPTION			
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STAND	ARD CODE	UNIT STAN	DARD 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

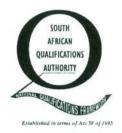
Demonstrate an understanding of the transport operation.

SPECIFIC OUTCOME 3

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

SPECIFIC OUTCOME 4

Demonstrate teamwork.



UNIT STANDARD:

244

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

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115774	Evaluate improvements to the quality of polished diamond gemstones by means of colour improvement							
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining a	nd Minerals		Undefined					
FIELD DESCH	RIPTION		SUBFIELL	DESCRIPTION				
Manufacturing	, Engineering ar	nd Technology	Fabrication	Fabrication and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-SGB MM Regular			Level 4	15				

Specific Outcomes:

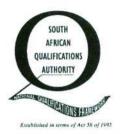
SPECIFIC OUTCOME 1

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

SPECIFIC OUTCOME 2

Estimate the potential added value of improvement.

SPECIFIC OUTCOME 3



UNIT STANDARD:

245

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

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115777	Evaluate improvements to the quality of polished diamond gemstones by means of deep boiling							
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining a	nd Minerals		Undefined					
FIELD DESCI	RIPTION		SUBFIELD	DESCRIPTION	1000			
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	IT STANDARD CODE UNIT STANI		DARD 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



UNIT STANDARD:

246

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

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE							
115780	Evaluate impro	Evaluate improvements to the quality of polished diamond gemstones by means of laser drilling							
SGB NAME			ABET BANK	O F	PROVIDER NAME				
SGB Mining and Minerals			Undefined						
FIELD DESC	RIPTION		SUBFIELD	DES	CRIPTION				
Manufacturing	, Engineering ar	nd Technology	Fabrication	and	Extraction				
UNIT STAND	ARD CODE	UNIT STANI	DARD TYPE	NQI	ELEVEL	CREDITS			
MET-FBE-0-SGB MM Regular			Leve	el 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



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 BANK	PROVIDER NAME	=			
SGB Mining a	nd Minerals		Undefined					
FIELD DESCI	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STANI		DARD 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



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 BAN	PROVIDER NAM	E		
SGB Mining and Minerals			Undefined				
FIELD DESCI	RIPTION		SUBFIELI	DESCRIPTION			
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction			
UNIT STAND	ARD CODE	UNIT STAN	DARD TYPE	NQF LEVEL	CREDITS		
MET-FBE-0-SGB MM Regular		***	Level 4	39			

Specific Outcomes:

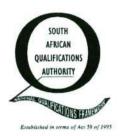
SPECIFIC OUTCOME 1

Describe the methods of improving polished diamond gemstones by repairs.

SPECIFIC OUTCOME 2

Estimate the potential added value of improvement.

SPECIFIC OUTCOME 3



UNIT STANDARD:

249

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

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE							
115751	Evaluate the effect of face confuguration on stress induced fracture patterns and orientations								
SGB NAME			ABET BANK	PROVIDER NAME					
SGB Mining and Minerals		Undefined							
FIELD DESCI	RIPTION		SUBFIELD DESCRIPTION						
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction					
UNIT STAND	ANDARD CODE UNIT STAN		DARD 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

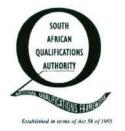
Demonstrate an understanding of the influence of face shapes.

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.



UNIT STANDARD:

250

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

SAQA US ID	UNIT STANDARD TITLE							
115756	Identify and ev	Identify and evaluate signs of deteriorating ground conditions during the mining process						
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals			Undefined					
FIELD DESC	RIPTION	7 w W.	SUBFIELD	DESCRIPTION				
Manufacturing	g, Engineering ar	nd Technology	Fabrication	and Extraction				
UNIT STAND	IT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-SGB MM Regular		<u> </u>	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.



UNIT STANDARD:

251

Monitor mine operations in a control room

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115648	Monitor mine o	Monitor mine operations in a control room						
SGB NAME			ABET BANK)	PROVIDER NAME			
SGB Mining and Minerals			Undefined					
FIELD DESC	RIPTION		SUBFIELD	DE.	SCRIPTION			
Manufacturing	g, Engineering ar	nd Technology	Fabrication	n and	Extraction			
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQ	F LEVEL	CREDITS			
MET-FBE-0-SGB MM Regular			Lev	/el 4	18			

Specific Outcomes:

SPECIFIC OUTCOME 1

Prepare to monitor mine operations.

SPECIFIC OUTCOME 2

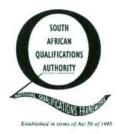
Communicate using communications technology.

SPECIFIC OUTCOME 3

Input, store and retrieve data.

SPECIFIC OUTCOME 4

Monitor mine operations.



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 SGB Mining and Minerals			ABET BANK	PROVIDER NAM	E			
			Undefined					
FIELD DESC	RIPTION		SUBFIELL	DESCRIPTION				
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	DARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	SGB MM	Regular		Level 4	3			

Specific Outcomes:

SPECIFIC OUTCOME 1

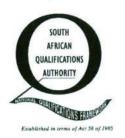
Prepare to over inspect.

SPECIFIC OUTCOME 2

Conduct over inspection.

SPECIFIC OUTCOME 3

Demonstrate teamwork.



UNIT STANDARD:

253

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

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115583	Over inspect operations in a blasting section in an underground coal mine							
SGB NAME ABET BAN			ABET BANK	PROVIDER NAME	•			
SGB Mining and Minerals			Undefined					
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	UNIT STANI	DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	SGB MM	Regular		Level 4	6			

Specific Outcomes:

SPECIFIC OUTCOME 1

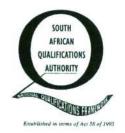
Prepare to over inspect operations in a blasting section.

SPECIFIC OUTCOME 2

Over inspect operations in a blasting section.

SPECIFIC OUTCOME 3

Demonstrate teamwork.



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 BANK	PROVIDER NAME				
SGB Mining and Minerals		Undefined						
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	g, Engineering a	nd Technology	Fabrication	and Extraction	***			
UNIT STAND	ARD CODE	CODE UNIT STANDAR		NQF LEVEL	CREDITS			
MET-FBE-0-S	GB 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.



UNIT STANDARD:

255

Oversee the process of diamond recovery from dense medium separation concentrates

SAQA US ID	UNIT STANDA	UNIT STANDARD TITLE						
115609	Oversee the process of diamond recovery from dense medium separation concentrates							
SGB NAME			ABET BANK	PROVIDER NAM	E			
SGB Mining and Minerals			Undefined	3 - 1 - 24 2				
FIELD DESC	RIPTION	200	SUBFIELD	DESCRIPTION				
Manufacturing	g, Engineering ar	nd Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	UNIT STAN	DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	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

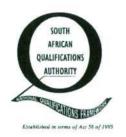
Demonstrate knowledge relating to the diamond recovery process.

SPECIFIC OUTCOME 3

Oversee the diamond recovery process.

SPECIFIC OUTCOME 4

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



UNIT STANDARD:

256

Handle explosives in a surface mining environment

SAQA US ID	UNIT STAND	UNIT STANDARD TITLE						
115514	Handle explos	Handle explosives in a surface mining environment						
SGB NAME	B NAME			PROVIDER NAM	E			
SGB Mining and Minerals			Undefined		10 F.W			
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	NDARD CODE UNIT STANDAI		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	GB 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.



UNIT STANDARD:

257

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

SAQA US ID	UNIT STANDARD TITLE							
115516	Investigate problems and recommend solutions for determinations relating to instumental techniques used in analytical laboratories							
SGB NAME			ABET BANK	PROVIDER NAME				
SGB Mining and Minerals		Undefined						
FIELD DESC	RIPTION		SUBFIELL	DESCRIPTION				
Manufacturing	, Engineering ar	nd Technology	Engineerin	g and Related Design				
UNIT STANDA	ARD CODE	UNIT STANI	DARD TYPE	NQF LEVEL	CREDITS			
MET-ENG-0-S	GB MM	Regular		Level 5	30			

Specific Outcomes:

SPECIFIC OUTCOME 1

Demonstrate knowledge relating to instrumental techniques.

SPECIFIC OUTCOME 2

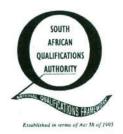
Investigate problems relating to the instrumental technique.

SPECIFIC OUTCOME 3

Analyse non-routine samples by instrumental techniques.

SPECIFIC OUTCOME 4

Develop a new method or modify an existing method.



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 SGB Mining and Minerals			ABET BANK	PROVIDER NAME				
			Undefined					
FIELD DESC	RIPTION		SUBFIELD DESCRIPTION					
Manufacturing	g, Engineering ar	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-S	GB MM	Regular	1	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

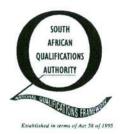
Investigate problems relating to the fusion process.

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.



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 samp	Log and sample faces to obtain geological information for quality control purposes in a kimberlit						
SGB NAME			ABET BANK	D	PROVIDER NAME			
SGB Mining and Minerals			Undefined			72		
FIELD DESC	RIPTION		SUBFIELL	D DE	SCRIPTION			
Manufacturing	, Engineering ar	nd Technology	Fabrication	n and	Extraction			
UNIT STANDA	ARD CODE	UNIT STANI	DARD TYPE	NQ	F LEVEL	CREDITS		
MET-FBE-0-S	GB MM	Regular		Lev	rel 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

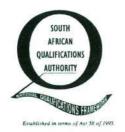
Log the face to be sampled.

SPECIFIC OUTCOME 4

Sample the logged face.

SPECIFIC OUTCOME 5

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



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 DESC	RIPTION		SUBFIELD DESCRIPTION					
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STAND	ARD CODE	UNIT STAN	DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	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



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 BANK	PROVIDER NAME					
SGB Mining and Minerals			Undefined						
FIELD DESCR	RIPTION		SUBFIELD	DESCRIPTION					
Manufacturing,	Engineering ar	d Technology	Fabrication	and Extraction					
UNIT STANDA	ARD CODE	UNIT STAN	DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-S	-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



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 BANK	PROVIDER NAME	E			
SGB Mining ar	nd Minerals		Undefined					
FIELD DESCR	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering ar	d Technology	Fabrication	and Extraction				
UNIT STAND	NIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS			
MET-FBE-0-S	-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



UNIT STANDARD:

263

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

SAQA US ID	UNIT STANDARD TITLE Log borehole core to obtain geological information on the lithologies in an alkaline magmatic deposit							
115710								
SGB NAME			ABET BANK	PROVIDER NAME	-			
SGB Mining and Minerals		Undefined		25.1				
FIELD DESC	RIPTION		SUBFIELD	DESCRIPTION				
Manufacturing	, Engineering a	nd Technology	Fabrication	and Extraction				
UNIT STANDARD CODE UNIT STAND		DARD TYPE	NQF LEVEL	CREDITS				
MET-FBE-0-S	ET-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



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	PROVIDER NAME				
SGB Mining and Minerals			Undefined		W. 110				
FIELD DESCRIPTION			SUBFIELD DESCRIPTION						
Manufacturing, Engineering and Technology			Fabrication and Extraction						
UNIT STANDA	ARD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS				
MET-FBE-0-S	GB MM	Regular		Level 5	7				

Specific Outcomes:

SPECIFIC OUTCOME 1

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

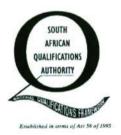
SPECIFIC OUTCOME 2

Prepare to log borehole core.

SPECIFIC OUTCOME 3

Log borehole core.

SPECIFIC OUTCOME 4



UNIT STANDARD:

265

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

SAQA US IL	UNIT STANDA	UNIT STANDARD TITLE							
115709	Log borehole of	Log borehole core to obtain geological information on the strata in a lode deposit							
SGB NAME ABET BAN			ABET BANK		PROVIDER NAME				
SGB Mining and Minerals			Undefined						
FIELD DESCRIPTION			SUBFIELL	DE	SCRIPTION				
Manufacturing, Engineering and Technology			Fabrication	and	1 Extraction				
UNIT STAN	DARD CODE	UNIT STANDARD TYPE		NG	F LEVEL	CREDITS			
MET-FBE-0-	SGB MM	Regular		Lev	vel 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



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	PROVIDER NAME			
SGB Mining and Minerals			Undefined		**************************************			
FIELD DESCRIPTION			SUBFIELD					
Manufacturing, Engineering and Technology			Fabrication and Extraction					
UNIT STANDA	RD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS			
MET-FBE-0-S	GB 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



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 BANK	PROVIDER NAME	PROVIDER NAME			
SGB Mining and Minerals FIELD DESCRIPTION			Undefined					
			SUBFIELD DESCRIPTION					
Manufacturing, Engineering and Technology			Fabrication	Fabrication and Extraction				
UNIT STAND	ARD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS			
MET-FBE-0-S	GB 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



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 STANDA	ARD TITLE		MIL				
115736	Log borehole core to obtain geological information of a heavy mineral placer deposit in problematic and unfamiliar geological environments							
SGB NAME SGB Mining and Minerals			ABET BAN	D PROVIDER NAME	PROVIDER NAME			
			Undefined					
FIELD DESCRIPTION			SUBFIELD DESCRIPTION					
Manufacturing, Engineering and Technology			Fabrication and Extraction					
UNIT STANDA	RD CODE	UNIT STANDARD TYPE		NQF LEVEL	CREDITS			
MET-FBE-0-S	GB 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



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 BANK	PROVI	PROVIDER NAME				
SGB Mining and Minerals			Undefined						
FIELD DESCI	RIPTION		SUBFIELD	DESCRIPT	TION				
Manufacturing, Engineering and Technology			Fabrication	Fabrication and Extraction					
UNIT STAND	ARD CODE	UNIT STANDARD TYP		NQF LEVE	L CRED	ITS			
MET-FBE-0-S	GB 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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