

MQA UNDERGROUND SKILLS PROGRAM – MQA/SP/0173/17

SAQA US ID	244474	ELECTIVE UNIT STANDARD		
Unit Standard Title	Drill holes by means of an electro hydraulic long hole drill rig in an underground workplace			
NQF Level	03	SGB	Mining and Minerals	
Credits	8	Notional Hours		80
Duration	Candidate	Knowledge	Practical	Workplace
	Novice	2 days	3 days	4 days / 32 hours
	RPL (Re-fresher)	1 day	1 day	N/A
	Re-certification	½ day	½ day	N/A
Ratio of candidates to assessor	4:1		4:1	1:1

NOTE: MQA SKILLS PROGRAM RULES BEFORE A SOR (Statement of Results) CAN BE ISSUED:

- All Cores need to be completed
- At least 1 Elective with a minimum of 7 Credits from the Elective Unit Standard
- Additional 1 Day is required to conduct the Summative Practical Assessment after workplace exposure (logbook).

<p><u>PURPOSE OF THE COURSE</u></p> <p>This unit standard will be useful to people who have to drill holes using an electro hydraulic long hole drill rig in an underground workplace</p>	<p><u>PRE-REQUISITES</u></p> <ul style="list-style-type: none"> • Take charge of and drive a trackless mobile machine in an underground mine • Follow basic occupational health and safety practices pertaining to mining operations at NQF Level 2. • Certified Copy of ID • Copy of learners Medical Certificate
<p><u>SPECIFIC OUTCOMES OF THE COURSE</u></p> <ul style="list-style-type: none"> • Explain the drilling of holes using an electro-hydraulic long hole drill rig. • Prepare to drill holes. • Drill holes. • Perform post-drilling activities 	
<p><u>ESSENTIAL EMBEDDED KNOWLEDGE</u></p> <p>The following embedded knowledge is addressed in an integrated way in the unit standard:</p> <p>Risks associated with workplace hazards relating to:</p> <ul style="list-style-type: none"> • Support conditions. • Ground conditions. • Misfires in rocks. • Environmental conditions i.e. heat, dust, visibility and ventilation flow. • Harmful gases. • Excessive water. • Debris in drilling area. • Confined areas. <p>Risks associated with work related hazards:</p> <ul style="list-style-type: none"> • Working in proximity of moving machinery. • Pedestrians and other workers. • Working in proximity of cables and pipes. • Hydraulic pressure. • Misfires. • Working with live current. • Fire to equipment. • Power failures. • Removal of drilling debris in drilling area • Intersection of Geological anomalies 	

- and aligning of machine.
 - Flooding.
- Basic principles of operation:**
- Positioning, levelling, alignment and stabilising of the drill rig.
 - Change of power source.
 - Manipulating of controls.
 - Manoeuvring of boom.
 - Position, direction and depth of hole.
 - Access restriction.
 - Replacement of worn and broken drilling accessories
- Occupational safety and occupational health environment:**
- Hazards and risks encountered.
 - Safety systems and health protection.
 - Personal protective equipment.
 - Environmental protection and pollution controls.
 - Emergency procedures.
 - Use of tools, material and equipment.
 - Brake failure.
 - Power failure.
 - Removal of debris in drilling area.
 - Intersection of Geological anomalies.
 - Positioning and aligning of machine.
 - Flooding.
- Applicable statutory requirements for a skid steer secondary drill rig:**
- Applicable Acts and Regulations.
 - Codes of Practice.
 - Operator competency requirements.
- Communication requirements:**
- Reporting.
 - Liaison with associated operators.
 - Interpreting and implementing instructions

Evidence Requirements Prior to Enrolment

- Mine Induction Records
- Medical Certificate
- Curriculum Vitae
- Testimonial

Logbook supporting evidence requirements:

*** compulsory and ** additional supporting evidence.**

- Completed and signed Checklists *
- Completed and signed Risk Assessment *
- Clocking records and equipment tag records. **