



UNIT STANDARD TRACKING DOCUMENT

National Certificate:Rockbreaking:Quarrying - Level 3

National certificate: Rockbreaking:Surface Mining - Level 2

National certificate: Rockbreaking:Surface Excavations - Level 3

Saturday, August 30, 2008

SURFACE EXCAVATIONS UNIT STANDARDS TRACKING DOCUMENT

Old NLRD Ref No	MQA Ref No	Title	L	C	New NLRD Ref No	MQA Ref No	Title	L	C	Comments
115613	MnS-G108	Conduct fire fighting in surface mines	2	16	12484		Perform basic fire fighting	2	4	Not equivalent - credits lower
					13912		Apply knowledge of self and team in order to develop a plan to enhance team performance	3	5	Newly added U/S
116663	CIA-G060	Make saw cuts by means of diamond wire saw	3	15	116663	CIA-G060	Make saw cuts by means of diamond wire saw	3	15	Equivalent
117877		Perform one-to-one training on the job	3	4	117877		Perform one-to-one training on the job	3	4	Equivalent
13941		Apply the budget function in a business unit	4	5	242810		Manage expenditure against a budget	4	6	Not equivalent - credits higher
10745	EnM-G012	Cut mild steel by means of an Oxy-acetylene cutting torch	2	3	244376	EnM-G012	Cut mild steel by means of an Oxy-acetylene cutting torch	2	3	Equivalent
					244422	MnH-G587	Demonstrate knowledge of the most common harmful gases and vapours	3	4	Newly added U/S
110191	MnS-G103	Demonstrate knowledge and ability to work in an Surface Mine	2	8	253025	MnS-G103	Demonstrate knowledge and ability to work in an Surface Mine	2	8	Equivalent
116622		Lift and position loads	3	12	253582		Lift and move a load using manual lifting equipment and tackle	2	8	Not equivalent - level and credits differ
10569	MnS-G039	Move Trailing Cable using Cable Reeler	2	8	256995	MnS-G039	Move Trailing Cable using Cable Reeler	2	8	Equivalent
					256996	MnS-G008	Relocate material using a dragline	3	26	New
115612	MnS-G106	Breaking rock using a hydraulic rock breaker.	2	13	256997	MnS-G106	Breaking rock using a hydraulic rock breaker.	2	13	Equivalent
					256998	MnS-G020	Deliver compressed air using a mobile electrical compressor	2	4	New
					257018	MnS-G 057	Relocate machines and equipment using Lowbed	2	10	New
11673	MnS-G019	Load, transport and place explosive components into blast holes using mixer-placer truck.	2	6	257019	MnS-G019	Load, transport and place explosive components into blast holes using mixer-placer truck.	2	6	Equivalent
120444	MnS-G055	Transport material and equipment using a flat back truck	2	10	257020	MnS-G055	Transport material and equipment using a flat back truck	2	10	Equivalent
					257021	MnS-G 054	Doze material using a Rubberwheel dozer	2	14	New
10566	MnS-G036	Haul and dump material using a haul truck	2	11	257024	MnS-G036	Haul and dump material using a haul truck	2	11	Equivalent
10567	MnS-G 037	Transport personnel, material and equipment using Light Delivery Vehicle.	2	4	257025	MnS-G 037	Transport personnel, material and equipment using Light Delivery Vehicle.	2	4	Equivalent
11672	MnS-G018	Drill blast holes in a Surface Mining Operation	3	15	257026	MnS-G018	Drill blast holes in a Surface Mining Operation	3	15	Equivalent
119967	MnS-G029	Operate Tractor Loader Backhoe	3	13	257028	MnS-G029	Operate Tractor Loader Backhoe	3	13	Equivalent
11125	MnS-G 052	Pump water using a dewatering pump.	2	4	257029	MnS-G 052	Pump water using a dewatering pump.	2	4	Equivalent
					257031	MnS-G026	Load, Haul and Dump material using a front end loader	2	16	New
9704	MnS-G004	Load material using a face shovel	3	26	257032	MnS-G004	Load material using a face shovel	3	26	Equivalent

11018	MnS-G014	Load and offload material using a skid steer loader	2	9	257034	MnS-G014	Load and off load material using a skid steer loader	2	9	Equivalent
					257035	MnS-G009	Load, haul and dump material using a scraper	2	12	New
11016	MnS-G 024	Use a track dozer to move material	2	14	257038	MnS-G 024	Use a track dozer to move material	2	14	Equivalent
230012	CLA-G056	Blast materials in quarry operations	3	15	257039	CLA-G056	Blast materials in Surface excavations	3	15	Equivalent
120443	MnS-G063	Bar down loose rocks using appropriate equipment	3	4	257041	MnS-G063	Bar down loose rocks using appropriate equipment	3	4	Equivalent
120436	Mns-G064	Install and maintain a initiating system in a surface mine	2	2	257042	Mns-G064	Install and maintain a initiating system in a surface mine	2	2	Equivalent
					257060	MnS-G050	Suppress dust using a water bowser	2	10	New
230016	CIA-G052	Design blasts for quarry operations	4	24	257075	CIA-G052	Design blasts for surface excavations	4	24	Equivalent
9705	MnS-G005	Excavate and load material using hydraulic excavator	3	26	257076	MnS-G005	Excavate and load material using hydraulic excavator	3	26	Equivalent
11698	MnS-G 045	Illuminate area using lighting plant.	1	1	257077	MnS-G 045	Illuminate area using lighting plant.	2	2	Not Equivalent - Higher level and credits
230014	CIA-G047	Carry out basic surveying and calculations in quarries	3	8	257095	CIA-G047	Carry out basic surveying and calculations in surface excavations	3	8	Equivalent
					257115	MnS-G043	Grade material using a motor grader.	3	14	New
116661	CLA-G057	Manufacture explosives on site for quarry operations	3	8	260984	CLA-G057	Manufacture explosives on site for surface excavations	3	8	Now registered
10490	CIA-G040	Carry out secondary breaking by mechanical means	2	8	10490	CIA-G040	Carry out secondary breaking by mechanical means	2	8	Equivalent
110218	CIA-G058	Collect, store and issue explosives from a surface magazine	3	10	110218	CIA-G058	Collect, store and issue explosives from a surface magazine	3	10	Equivalent
115101	OcS-F015	Address workplace hazards and risks	2	4	115101	OcS-F015	Address workplace hazards and risks	2	4	Equivalent - (SAQA NLRD number still valid)
116520	OcS-F006	Apply safety, health and environmental principles and procedures in a workplace	2	2	116520	OcS-F006	Apply safety, health and environmental principles and procedures in a workplace	2	2	Equivalent - (SAQA NLRD number still valid)
116533	OcH-G106	Demonstrate basic knowledge and understanding of emergency preparedness and response	2	2	116533	OcH-G106	Demonstrate basic knowledge and understanding of emergency preparedness and response	2	2	Equivalent - (SAQA NLRD number still valid)
116534	OcM-G011	Carry out basic first aid treatment in the workplace	3	2	116534	OcM-G011	Carry out basic first aid treatment in the workplace	3	2	Equivalent - (SAQA NLRD number still valid)
116614	CIA-G062	Conduct blasting operations in dimension stone quarries	3	15	116614	CIA-G062	Conduct blasting operations in dimension stone quarries	3	15	Equivalent - (SAQA NLRD number still valid)
116625	CIA-G063	Split dimension stone blocks by means of non explosive methods	2	4	116625	CIA-G063	Split dimension stone blocks by means of non explosive methods	2	4	Equivalent
116626	CIA-G065	Handle dimension stone blocks by means of front end loader	3	13	116626	CIA-G065	Handle dimension stone blocks by means of front end loader	3	13	Equivalent
116627	CIA-G066	Demonstrate basic understanding of dimension stone geology and mineralogy	3	16	116627	CIA-G066	Demonstrate basic understanding of dimension stone geology and mineralogy	3	16	Equivalent - (SAQA NLRD number still valid)
116632	CIA-G100	Drill holes for blasting and/or splitting dimension stone blocks using a mechanised drill rig	2	6	116632	CIA-G100	Drill holes for blasting and/or splitting dimension stone blocks using a mechanised drill rig	2	6	Equivalent - (SAQA NLRD number still valid)
116658	CIA-G064	Drill intersecting holes for diamond wire sawing	2	7	116658	CIA-G064	Drill intersecting holes for diamond wire sawing	2	7	Equivalent

116937		Use a Graphical User Interface (GUI)-based spreadsheet application to create and edit spreadsheets	2	4	116937		Use a Graphical User Interface (GUI)-based spreadsheet application to create and edit spreadsheets	2	4	Equivalent
117924		Use a Graphical User Interface (GUI)-based word processor to format documents	2	5	117924		Use a Graphical User Interface (GUI)-based word processor to format documents	2	5	Equivalent
14911	MnC-G090	Participate in formal meetings	2	3	14911	MnC-G090	Participate in formal meetings	2	3	Equivalent
230010	CIA-G054	Demonstrate knowledge of the geological nature of surface extraction sites	3	6	230010	CIA-G054	Demonstrate knowledge of the geological nature of surface extraction sites	3	6	Equivalent - (SAQA NLRD number still valid)
230011	CIA-G054	Drill medium diameter blast holes using an hydraulic or pneumatic drilling rig and compressor	2	5	230011	CIA-G054	Drill medium diameter blast holes using an hydraulic or pneumatic drilling rig and compressor	2	5	Equivalent
230013	CIA-G051	Conduct face profiling and blast hole surveys	3	6	230013	CIA-G051	Conduct face profiling and blast hole surveys	3	6	Equivalent
230017	CIA-G050	Carry out blasting environmental testing	4	6	230017	CIA-G050	Carry out blasting environmental testing	4	6	Equivalent
230018	CIA-G059	Operate a mixer-placer explosives truck	2	6	230018	CIA-G059	Operate a mixer-placer explosives truck	2	6	Equivalent
230019	CIA-G069	Demonstrate and apply knowledge of dimension stone quality and geology to block extraction	3	21	230019	CIA-G069	Demonstrate and apply knowledge of dimension stone quality and geology to block extraction	3	21	Equivalent
230020	Cla-G101	Drill small diameter blast holes using a drilling rig and compressor .	2	5	230020	Cla-G101	Drill small diameter blast holes using a drilling rig and compressor .	2	5	Equivalent - (SAQA NLRD number still valid)
244378	MnH-G800	Receive, handle, store and issue explosives and accessories at a workplace	2	2	244378	MnH-G800	Receive, handle, store and issue explosives and accessories at a workplace	2	2	Equivalent - (SAQA NLRD number still valid)
11666	MnS-G011	Transport and distribute explosives using a light delivery explosives vehicle.	1	4	257015	MnS-G011	Transport and distribute explosives by means of a light duty explosives vehicle	2	2	Re-written on a higher level
115507	CIA-G034	Examine and make safe non-blasted quarry excavations	3	4	257016	CIA-G034	Examine and make safe non-blasted surface excavations	3	4	Equivalent - (SAQA NLRD number still valid)
9708	MnS-G012	Transport and distribute explosives using a heavy duty explosives vehicle	1	4	257017	MnS-G012	Transport and distribute explosives using a heavy duty explosives vehicle	2	2	Re-written on a higher level
					257022	Cla-G113	Make up primer and charge holes	2	2	U/S 15514 was split
115615	MnS-G109	Co-ordinate drilling and blasting operations	3	26	257023	MnS-G109	Co-ordinate drilling and blasting operations	3	10	Re-written less credits
					257027	CIA-G111	Install support in surface mines and quarries	3	7	U/S 116630 was split
115527	MnS-G152	Assist blasting operations	2	4	257030	MnS-G152	Assist blasting operations	2	4	Equivalent
116630	CIA-G071	Install and maintain support in surface mines and quarries	3	10	257033	CIA-G110	Demonstrate an understanding of support methods in surface excavations	2	4	U/S 116630 was split
115514	CIA-G070	Handle explosives in a surface mining environment	2	5	257036	Cla-G114	Demonstrate basic understanding of explosives and accessories.	2	2	U/S 15514 was split
116666	CIA-G049	Carry out secondary breaking using explosives	3	11	257037	CIA-G049	Carry out secondary breaking using explosives in surface excavations	3	11	Equivalent - (SAQA NLRD number still valid)
11667	MnS-G013	Dewater blast holes using vehicle mounted dewatering pump	2	4	257040	MnS-G013	Dewater blast holes using vehicle mounted dewatering pump	2	4	Equivalent
120441	Mns-G065	Identify and demarcate a misfire in a surface mine.	2	2	257055	Mns-G065	Identify and demarcate misfires in a surface excavation	2	2	Equivalent
9714	MnS-G075	Remove hazardous ground by means of blasting	2	1	257056	MnS-G075	Remove hazardous ground by means of blasting	3	4	Re-written on a higher level
120436	Mns-G064	Install and maintain an initiating system in a surface mine	2	2	257058	Cla-G112	Time and connect blast initiating systems to a standard pattern	2	2	Equivalent
11128	MnS-G071	Prepare and mark off work area for drilling	2	1	257059	MnS-G071	Prepare and mark off work area for drilling	3	3	Re-written on a higher level
115535	CIA-G021	Examine and make safe blasted quarry excavations	3	5	257078	CIA-G021	Examine and make safe blasted surface excavations	3	5	Equivalent

11697	MnS-G 042	Transport and distribute fuel using Fuel Bowser.	2	4	257135	MnS-G042	Transport and distribute fuel using a Fuel Bowser	2	4	Added to Qualification
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	ID	UNIT STANDARD TITLE	LEVEL	CREDITS
Core	115101	Address workplace hazards and risks	Level 2	4
Core	116520	Apply safety, health and environmental principles and procedures in a workplace	Level 2	2
Core	257036	Demonstrate a basic understanding of explosives and accessories	Level 2	2
Core	257033	Demonstrate an understanding of support methods in surface mines and quarries	Level 2	4
Core	116533	Demonstrate basic knowledge and understanding of emergency preparedness and response	Level 2	2
Core	257055	Identify and demarcate misfires in a surface excavation	Level 2	2
Core	257022	Make up primer and charge holes	Level 2	2
Core	244378	Receive, handle, store and issue explosives and accessories at a workplace	Level 2	2
Core	257058	Time and connect blast initiating systems	Level 2	2
Core	116534	Carry out basic first aid treatment in the workplace	Level 3	2
Core	257037	Carry out secondary breaking using explosives in surface excavations	Level 3	11
Core	257023	Co-ordinate drilling and blasting operations	Level 3	10
Core	230010	Demonstrate knowledge of the geological nature of surface extraction sites	Level 3	6
Core	257078	Examine and make safe blasted Surface excavations	Level 3	5
Core	257016	Examine and make safe non-blasted surface excavations	Level 3	4
Core	257059	Prepare and mark off work area for drilling	Level 3	3
Core	257057	Read and interpret surface excavation plans	Level 3	2
Fundamental	119472	Accommodate audience and context needs in oral/signed communication	Level 3	5
Fundamental	9010	Demonstrate an understanding of the use of different number bases and measurement units and an awareness of error in the context of relevant calculations	Level 3	2
Fundamental	9013	Describe, apply, analyse and calculate shape and motion in 2- and 3-dimensional space in different contexts	Level 3	4
Fundamental	119457	Interpret and use information from texts	Level 3	5
Fundamental	9012	Investigate life and work related problems using data and probabilities	Level 3	5
Fundamental	119467	Use language and communication in occupational learning programmes	Level 3	5
Fundamental	7456	Use mathematics to investigate and monitor the financial aspects of personal, business and national issues	Level 3	5
Fundamental	119465	Write/present/sign texts for a range of communicative contexts	Level 3	5
Elective	257030	Assist blasting operations	Level 2	4
Elective	256997	Break rock using a hydraulic rock breaker	Level 2	13
Elective	10490	Carry out secondary breaking by mechanical means	Level 2	8
Elective	244376	Cut mild steel by means of an Oxy-acetylene cutting torch	Level 2	3
Elective	257040	De-water blast holes using vehicle mounted de-watering pump	Level 2	4
Elective	256998	Deliver compressed air using a mobile electrical compressor	Level 2	4

Elective	253025	Demonstrate knowledge and ability to work in a surface mine	Level 2	8
Elective	257021	Doze material using a rubber wheel dozer	Level 2	14
Elective	116632	Drill holes for blasting and/or splitting dimension stone blocks using a mechanised drill rig	Level 2	6
Elective	116658	Drill intersecting holes for diamond wire sawing	Level 2	7
Elective	230011	Drill medium diameter blast holes using an hydraulic or pneumatic drilling rig and compressor	Level 2	5
Elective	230020	Drill small diameter blast holes using a percussion drilling rig and compressor	Level 2	5
Elective	257024	Haul and dump material using a haul truck	Level 2	11
Elective	257077	Illuminate an area using a lighting plant	Level 2	2
Elective	257042	Install and maintain an initiating system in a surface mine	Level 2	2
Elective	253582	Lift and move a load using manual lifting equipment and tackle	Level 2	8
Elective	257034	Load and offload material using a skid steer loader	Level 2	9
Elective	257031	Load, Haul and Dump material using a front end loader	Level 2	16
Elective	257035	Load, haul and dump material using a scraper	Level 2	12
Elective	257019	Load, transport and place explosives components into blast holes using a mixer-placer truck	Level 2	6
Elective	256995	Move trailing cable using cable reeler	Level 2	8
Elective	230018	Operate a mixer-placer explosives truck	Level 2	6
Elective	14911	Participate in formal meetings	Level 2	3
Elective	12484	Perform basic fire fighting	Level 2	4
Elective	257029	Pump water using a De-watering Pump	Level 2	4
Elective	257018	Relocate machines and equipment using a lowbed	Level 2	10
Elective	116625	Split dimension stone blocks by means of non explosive methods	Level 2	4
Elective	257060	Suppress dust using a water bowser	Level 2	10
Elective	257015	Transport and distribute explosives by means of a light duty explosives vehicle	Level 2	4
Elective	257017	Transport and distribute explosives using a heavy-duty explosives vehicle	Level 2	2
Elective	257135	Transport and distribute fuel using a Fuel Bowser	Level 2	4
Elective	257020	Transport material and equipment using a flat back truck	Level 2	10
Elective	257025	Transport personnel, material and equipment using Light Delivery Vehicle	Level 2	4
Elective	116937	Use a Graphical User Interface (GUI)-based spreadsheet application to create and edit spreadsheets	Level 2	4
Elective	117924	Use a Graphical User Interface (GUI)-based word processor to format documents	Level 2	5
Elective	257038	Use a track dozer to move material	Level 2	14
Elective	13912	Apply knowledge of self and team in order to develop a plan to enhance team performance	Level 3	5
Elective	257041	Bar down loose rocks using appropriate equipment	Level 3	4
Elective	257039	Blast materials in Surface excavations	Level 3	15
Elective	257095	Carry out basic surveying and calculations in surface excavations	Level 3	8
Elective	110218	Collect, store and issue explosives from a surface magazine	Level 3	10
Elective	116614	Conduct blasting operations in dimension stone quarries	Level 3	15

Elective	230013	Conduct face profiling and blast hole surveys	Level 3	6
Elective	230019	Demonstrate and apply knowledge of dimension stone quality and geology to block extraction	Level 3	21
Elective	116627	Demonstrate basic understanding of dimension stone geology and mineralogy	Level 3	16
Elective	244422	Demonstrate knowledge of the most common harmful gases and vapours	Level 3	4
Elective	257026	Drill blast holes in a surface mining operation	Level 3	15
Elective	257076	Excavate and load material using hydraulic excavator	Level 3	26
Elective	257115	Grade material using a motor grader	Level 3	14
Elective	116626	Handle dimension stone blocks by means of front end loader	Level 3	13
Elective	257027	Install support in surface mines and quarries	Level 3	7
Elective	257032	Load material using a face shovel	Level 3	26
Elective	116663	Make saw cuts by means of diamond wire saw	Level 3	15
Elective	257028	Operate Tractor Loader Backhoe	Level 3	13
Elective	117877	Perform one-to-one training on the job	Level 3	4
Elective	256996	Relocate material using a dragline	Level 3	26
Elective	257056	Remove hazardous ground by means of blasting	Level 3	4
Elective	230017	Carry out blasting environmental testing	Level 4	6
Elective	257075	Design blasts for surface excavations	Level 4	24
Elective	242810	Manage Expenditure against a budget	Level 4	6