



SANIRE

SOUTH AFRICAN NATIONAL INSTITUTE OF ROCK ENGINEERING

COAL BRANCH

STRATA CONTROL OFFICER PRACTICAL EXAMINATION LOGBOOK

Name:	
ID number:	
Signature:	
Date:	

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SCO Coal Trainee – Logbook

Final sign-off:		
Candidate is ready to partake in the practical examination	Yes	No

I _____ the undersigned hereby declared that
 _____ has done the required shifts stipulated in
 this Logbook and is ready to partake in the practical examination for the Strata Control Ticket.

Name:	
ID number	
Designation:	
Mining House:	
REC number:	
Signature:	
Date:	

Item	Shifts	Description	Sign / Test
Elementary Mining Course	10	CTC course - Optional	
Underground Mining operations	75 Shifts	Depending on the type of shifts (? HRS)	
Basic			5 Shifts
* Support design (practical application)			
* Section lay-out, including basic design concepts - SF w:h ratio			
* Responsibilities of line-personnel in a section			
* Cutting and bolting cycles (understanding) conventional / mechanical, cable handling, PDS systems			
Excavation control (horizon control, bord widths, off line mining, cut-out distances - differences in High, Moderate & Low risk ground)			2 Shifts
* Bi-sects, bobbins and line taking			
* Boxing / Breakaway / Holing			
Safe making			2 Shifts
* Sounding and barring			
* Initial and periodic examination and safe declaration / TARP			
* Inspecting and making safe to detect and manage: - Unstable roof skin - Unstable bolted beams - Faulted & jointed ground - Unstable sidewalls - Hydraulic & gas pressure			
Monitoring			2 Shifts
* Roof Monitoring Devices, / Convergence meters, Feeler gauges, Timber poles & other relevant instrumentation			
* Torque Tension Indicators			
Risk assessment / Hazard Identification			2 Shifts
* SLAM / HIRAC - equivalent			
* Planned Task Observations			

Item	Shifts	Description	Sign / Test
* Issue based Risk Ass			
Exposure to pillar extraction			2 Shifts
* Basic design concepts * Extraction sequence * Breaker lines * Direction lines * Support systems * Monitoring * Risk Areas * Retrieval strategies			
Exposure to Longwall mining			2 Shifts
* Support design strategy * Basic design concepts * Chain road development * General section layout * Equipment * Air blasts * Monitoring * Long wall moves (Theory) * Face breaks (Theory)			
Proper application of specialized support units:			2 Shifts
* Long anchors (Torque indicators, grouting, tensioning, breather, resin and mechanical anchors, hole size, etc.)			
* Mesh / nets / straps			
* Elongates - props and mine poles, temporary support jacks			
Roof bolter experience			10 Shifts
* Work procedures (PTO) for different roof bolting machines to ensure proper installation of roof bolts			
* Management of support units within the section.			
* TRS			
* Sequence			

Comments by Senior Mining Supervisor

Hereby I the undersigned declare that the candidate completed the required shifts as stipulated above. The candidate has shown sufficient basic knowledge of the underground mining operation.

Name:			
Designation			
Signature:			
Date:			
Item	Shifts	Description	Sign / Test
Ventilation (ventilation layout, vent survey with vent officer, exposure to gas testing)			2 days
* Vent layouts			
* Dust suppression			
* Gas dilution			
* Legal requirements			
* Return Airway inspections			
* Inspections of seals			
* Inspection of regulators			
* Construction of seals			
* Standards and procedures			
* Air utilisation			

Comments by Senior Ventilation Officer

Hereby I the undersigned declare that the candidate completed the required shifts as stipulated above. The candidate has shown sufficient basic knowledge of the underground ventilation system.

Name:			
Designation			
Signature:			
Date:			
Item	Shifts	Description	Sign / Test
Outbye Shiftboss (Responsibilities)			5 days
* Safe declaration			
* Hazard identification			
* Water management			
* Stone dusting			
* Infrastructure inspections			
* Access & exit examination			
* Service / large excavations, shaft bottom, vent shafts			
* Water seals / dam wall inspections			

Comments by Outbye Shiftboss

Hereby I the undersigned declare that the candidate completed the required shifts as stipulated above. The candidate has shown sufficient basic knowledge of the duties and responsibilities of the underground Outbye Shiftboss.

Name:	
Designation	
Signature:	
Date:	

Item	Shifts	Description	Sign / Test
Exposure to Stone work			5 days
* Safe declaration			
* Dyke development			
* Brushing & Sliping			
* Drilling & Blasting			
* Monitoring			
* Support design & installation			
* Air crossings & other excavations			
* Support equipment & handheld machines			

Comments by Stonework Mine Overseer / Section Manager

Hereby I the undersigned declare that the candidate completed the required shifts as stipulated above. The candidate has shown sufficient basic knowledge of the underground stonework operation.

Name:			
Designation			
Signature:			
Date:			
Survey OC and UG			5 Shifts
* Peg installations with surveyor			
* Plan reading			
* Mine layout and pillar design			
* Survey plans			
* Off-line mining			
* Survey office duties in respect of the FOG COP			
* Requirements when undermining surface structures or constructing close to mined out areas			
Comments by Senior Mine Surveyor / Survey Manager			

Hereby I the undersigned declare that the candidate completed the required shifts as stipulated above. The candidate has shown sufficient basic knowledge of the underground mine survey activities.

Name:			
Designation			
Signature:			
Date:			
Geology UG and OC - conceptual:			2 Shifts
* Mapping			
* Logging			
* Plotting			
* Feature identification			
* Grade control			
* Exploration strategy			
* Constructing a geological model			
* Constructing a geotechnical model to define mineability			
* Cover drilling - horizontal / long hole drilling ahead of mining			
* Geological department duties in respect of the FOG COP			

Comments by Senior Mine Geologist / Geology Manager	

Hereby I the undersigned declare that the candidate completed the required shifts as stipulated above. The candidate has shown sufficient basic knowledge of the underground geological activities.

Name:			
Designation			
Signature:			
Date:			
Planning UG - conceptual:			1 Shift
* Scheduling / Sequencing			
* Attending & input during planning meetings			
Planning OC - conceptual:			1 Shift
* Scheduling / Sequencing			
* Attending & input during planning meetings			
Comments by Senior Mine Planner / Planning Manager			

Hereby I the undersigned declare that the candidate completed the required shifts as stipulated above. The candidate has shown sufficient basic knowledge of the planning cycle.

Name:	
Designation	
Signature:	
Date:	

Opencast Mining operations			15 Shifts
Slope stability risk management			
* Risk assessments			
* Safe declarations			
* Slope monitoring			
* Old workings / sinkholes / subsidence			
* Spontaneous combustion management			
Opencast mining methods & design strategies			
* Dragline Operations			
* Truck and Shovel			
* Pre-stripping			
* High wall design			
* Low wall design			
* Failure Mechanisms			
* High wall Mapping			
* Ground water management (pumping, crest water and sumps)			
Blasting (Optional)			
* Cast blasting			
* Pre-split blasting			
* Dress blasting			
* Blasting pattern & design - Burden, spacing & powder factor			
* Buffer blasting			

Comments by Senior Opencast Mining Official / Opencast Section Manager



Hereby I the undersigned declare that the candidate completed the required shifts as stipulated above. The candidate has shown sufficient basic knowledge of the Opencast mining methods and cycles.

Name:	
Designation	
Signature:	
Date:	

General rock engineering support services:			15 Shifts
* As per the syllabus & DMR COP Guidelines			
* Inputs into mine lay-out and pillar design (basic understanding)			
* Support material and accessories specifications and quality control systems (advanced understanding)			
* Content of FOG COP & supporting documents (SOP's, Standards, Procedures etc.			
* Report writing			
* Support design			
* Hazard plans / Geotechnical domains			
* Training material (risk training)			
* Incident investigations			
Quality control systems to ensure proper supporting standards			
* Stores - Stacking, Expiry management, FIFO			
* Tests & Tests certificates			
* Exposure to SEPT			
Special area (Declarations, inspections, demarcation, committees)			
Management of typical strata conditions associated with different geological structures / Special Areas			

Comments by holder of COM Certificate in Rock Mechanics / Rock Engineering Manager

Hereby I the undersigned declare that the candidate completed the required shifts as stipulated above.

Name:	
Designation	
Signature:	
Date:	

