

## Self-Assessment Checklist

<b>Candidate Name</b>	
<b>Registration No.</b>	
<b>Qualification</b>	National Vocational Certificate level 1 to 5, Mining Process Technology
<b>Competency Standards</b>	<ol style="list-style-type: none"> <li>1. Construct and maintain roads</li> <li>2. Undertake dewatering activities</li> <li>3. Perform soil profiling</li> <li>4. Interpret geophysical data collection</li> <li>5. Perform physical, optical and chemical evaluation of minerals</li> <li>6. Perform application of GIS (geographical information system) in mining technology</li> <li>7. Apply methods of quality control in aggregate, concrete, grout and shotcrete</li> <li>8. Evaluate rock mechanics and ground control</li> <li>9. Perform mine ventilation design and process</li> <li>10. Develop Project Proposal</li> <li>11. Apply management and communication techniques</li> <li>12. Develop project management plan</li> <li>13. Identify and resolve problems</li> <li>14. Develop communication skills</li> </ol>
<b>Assessment Task</b>	<p><b>Plan, execute the earth and mining work according the following parameters</b></p> <ol style="list-style-type: none"> <li>1) Develop Project Proposal</li> <li>2) Interpret geophysical data</li> </ol> <p><b>Note: Estimated time to conduct the above activity is 40 hours, however the assessor may follow the instruction given by the assessment center to manage the time accordingly.</b></p>

I can.....

Performance Criteria	Yes	No
1. Prepare initial plan for road construction and maintenance	<input type="checkbox"/>	<input type="checkbox"/>
2. Implement initiatives to support workforce planning objectives	<input type="checkbox"/>	<input type="checkbox"/>
3. Ensure safe work environment	<input type="checkbox"/>	<input type="checkbox"/>
4. Maintain professionalism in workplace	<input type="checkbox"/>	<input type="checkbox"/>
5. Organize dewatering activities as per job specification	<input type="checkbox"/>	<input type="checkbox"/>
6. Perform soil profiling as per given site	<input type="checkbox"/>	<input type="checkbox"/>
7. Select geophysical method as required	<input type="checkbox"/>	<input type="checkbox"/>
8. Analyze layout plan and targeted depth of investigated area	<input type="checkbox"/>	<input type="checkbox"/>
9. Analyze geophysical interpreted results for mining exploration	<input type="checkbox"/>	<input type="checkbox"/>
10. Perform geochemical and mineralogy of ores	<input type="checkbox"/>	<input type="checkbox"/>
11. Setup google earth as per job requirements	<input type="checkbox"/>	<input type="checkbox"/>

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12. Operate Google Earth as requirements	<input type="checkbox"/>	<input type="checkbox"/>
13. perform analysis and Georeferencing in Arc GIS as required	<input type="checkbox"/>	<input type="checkbox"/>
14. Perform crushing test as required	<input type="checkbox"/>	<input type="checkbox"/>
15. Perform Impact test as required	<input type="checkbox"/>	<input type="checkbox"/>
16. Carry out Soundness test as required	<input type="checkbox"/>	<input type="checkbox"/>
17. Execute Shape test as required	<input type="checkbox"/>	<input type="checkbox"/>
18. Perform Specific gravity test as required	<input type="checkbox"/>	<input type="checkbox"/>
19. Carry out Absorption test as required	<input type="checkbox"/>	<input type="checkbox"/>
20. Evaluate the mechanical properties of rock	<input type="checkbox"/>	<input type="checkbox"/>
21. Develop model for ventilation system	<input type="checkbox"/>	<input type="checkbox"/>

Candidate's Signature \_\_\_\_\_

Assessor's Signature \_\_\_\_\_

Date: \_\_\_\_\_

## Instruction Sheet for the Candidate

Qualification	National Vocational Certificate level 1 to 5, Mining Process Technology
Competency Standard(s)	<ol style="list-style-type: none"><li>1. Construct and maintain roads</li><li>2. Undertake dewatering activities</li><li>3. Perform soil profiling</li><li>4. Interpret geophysical data collection</li><li>5. Perform physical, optical and chemical evaluation of minerals</li><li>6. Perform application of GIS (geographical information system) in mining technology</li><li>7. Apply methods of quality control in aggregate, concrete, grout and shotcrete</li><li>8. Evaluate rock mechanics and ground control</li><li>9. Perform mine ventilation design and process</li><li>10. Develop Project Proposal</li><li>11. Apply management and communication techniques</li><li>12. Develop project management plan</li><li>13. Identify and resolve problems</li><li>14. Develop communication skills</li></ol>

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Candidate Details	Name _____ Registration/Roll Number _____
Guidance for Candidate	<p><b>To meet this standard, you are required to complete the following within the given time frame (for practical demonstration &amp; assessment):</b></p> <p><b>Plan, execute the earth and mining work according the following parameters</b></p> <ol style="list-style-type: none"> <li>1) Develop Project Proposal</li> <li>2) Interpret geophysical data</li> </ol> <p><b>Note: Estimated time to conduct the above activity is 40 hours, however the assessor may follow the instruction given by the assessment center to manage the time accordingly.</b></p>
Time: 40 hours	During a practical assessment, under observation by an assessor, you are required to demonstrate the following criteria:
Minimum Evidence Required	<ol style="list-style-type: none"> <li>1. Prepare initial plan for road construction and maintenance</li> <li>2. Implement initiatives to support workforce planning objectives</li> <li>3. Ensure safe work environment</li> <li>4. Maintain professionalism in workplace</li> <li>5. Organize dewatering activities as per job specification</li> <li>6. Perform soil profiling as per given site</li> <li>7. Select geophysical method as required</li> <li>8. Analyze layout plan and targeted depth of investigated area</li> <li>9. Analyze geophysical interpreted results for mining exploration</li> <li>10. Perform geochemical and mineralogy of ores</li> <li>11. Setup google earth as per job requirements</li> <li>12. Operate Google Earth as requirements</li> <li>13. perform analysis and Georeferencing in Arc GIS as required</li> <li>14. Perform crushing test as required</li> <li>15. Perform Impact test as required</li> <li>16. Carry out Soundness test as required</li> <li>17. Execute Shape test as required</li> <li>18. Perform Specific gravity test as required</li> <li>19. Carry out Absorption test as required</li> <li>20. Evaluate the mechanical properties of rock</li> <li>21. Develop model for ventilation system</li> </ol>



## Observation Checklist

<b>Assessment Task</b>	<b>Plan, execute the earth and mining work according the following parameters</b> 1) Develop Project Proposal 2) Interpret geophysical data  <b>Note: Estimated time to conduct the above activity is 40 hours, however the assessor may follow the instruction given by the assessment center to manage the time accordingly.</b>			
<b>During the practical assessment, candidate demonstrated the following:</b>		<b>Yes</b>	<b>No</b>	<b>Remarks</b>
1.	Identified workforce as per requirements			
2.	Implemented initiatives to support workforce planning objectives			
3.	Prepare initial plan for road construction and maintenance			
4.	Implement initiatives to support workforce planning objectives			
5.	Ensure safe work environment			
6.	Maintain professionalism in workplace			
7.	Organize dewatering activities as per job specification			
8.	Perform soil profiling as per given site			
9.	Select geophysical method as required			
10.	Analyze layout plan and targeted depth of investigated area			
11.	Analyze geophysical interpreted results for mining exploration			
12.	Perform geochemical and mineralogy of ores			
13.	Setup google earth as per job requirements			
14.	Operate Google Earth as requirements			
15.	perform analysis and Georeferencing in Arc GIS as required			
16.	Perform crushing test as required			
17.	Perform Impact test as required			
18.	Carry out Soundness test as required			
19.	Execute Shape test as required			
20.	Perform Specific gravity test as required			
21.	Carry out Absorption test as required			
<b>Competent</b> <input type="checkbox"/>		<b>Not Yet Competent</b> <input type="checkbox"/>		

<b>Feedback to the Candidate</b>	
<b>Candidate's Signature</b> _____	<b>Assessor's Signature</b> _____