

Position: **Benchmark Job #067**

Ministry: Transportation and Highways

Working Title: **Head, Drilling Rig Operator**

Branch: Geotechnical and Materials Branch

Level: Range 13

Location: Burnaby

NOC Code: 7372

## PRIMARY FUNCTION

To set up and operate mobile diamond drill rig (land based or off shore) and provide soil samples to engineers; lead a crew of helpers.

## JOB DUTIES AND TASKS

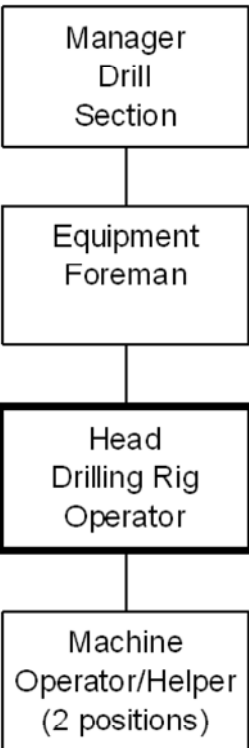
1. Sets up and operates a mobile diamond drill rig to drill test holes and take samples
  - a. drives 5 ton air brake truck to various drill sites in the field
  - b. determines access route to drill site and suitability of drill hole location
  - c. sets up drill rig to level position using pod jacks
  - d. sets rod jacks and strings on rods to be used for hole
  - e. sets up water line or water pump and lays out hose to drill rig from source
  - f. mixes and inserts mud to reduce friction and sticking of rods during operation of drill rig
  - g. maintains and updates core and soil log records
  - h. monitors water depths and tides when working on barge
  - i. cleans and services drilling equipment
  - j. restores drill site to original condition upon completion
  - k. performs field repairs on drill equipment, vehicles, barge and motor boats
2. Performs lead hand duties
  - a. assigns, monitors and reviews work of a field crew of 2 Helpers
  - b. provides direction to hired equipment operators
  - c. provides performance information to supervisor responsible for formal appraisal
3. Performs other related duties
  - a. exchanges information with engineers on core findings and drill problems
  - b. carries x-ray drill and other equipment to various locations for drilling purposes
  - c. authorizes equipment repairs
  - d. arranges for and signs hire agreements
  - e. clears access to drill sites using shovel, pick, axe and chainsaw
  - f. operates motor boats and vehicles in isolated field conditions

Manager  
Drill  
Section

Equipment  
Foreman

Head  
Drilling Rig  
Operator

Machine  
Operator/Helper  
(2 positions)



FACTOR	REASON FOR CLASSIFICATION	DEGREE	POINTS
1	<p><b>JOB KNOWLEDGE</b></p> <p>Understand and apply the accepted methods of mobile drilling to set up and operate a mobile drilling rig to drill test holes and perform field repairs.</p>	E	145
2	<p><b>MENTAL DEMANDS</b></p> <p>Judgement to assess differing field conditions and choose an approach using a combination of accepted drilling techniques and equipment to direct, set up and operate land based or off-shore drilling rigs.</p>	D	100
3	<p><b>INTERPERSONAL COMMUNICATION SKILLS</b></p> <p>Discretion required to provide direction for completion of work tasks to field crew.</p>	C	30
4	<p><b>PHYSICAL COORDINATION AND DEXTERITY</b></p> <p>Significant coordination and dexterity required to set up and operate a diamond drill rig to drill test holes in a variety of field conditions.</p>	D	22.5
5	<p><b>RESPONSIBILITY FOR WORK ASSIGNMENTS</b></p> <p>Guided by general procedures or instructions, selects alternative course of action to set up and operate diamond drilling rig in remote locations to provide soil samples for road design, lead crew of drill rig helpers, perform field repairs on equipment and select drill hole locations and site access.</p>	D	75
6	<p><b>RESPONSIBILITY FOR FINANCIAL RESOURCES</b></p> <p>Moderate financial responsibility to authorize equipment repairs and to arrange for contract work using hire agreements.</p>	D	22.5

FACTOR	REASON FOR CLASSIFICATION	DEGREE	POINTS
7	<b>RESPONSIBILITY FOR PHYSICAL ASSETS/INFORMATION</b> Significant responsibility to operate a mobile drill rig and perform temporary repairs to a variety of drills, trucks, barge and motor boats.	D	22.5
8	<b>RESPONSIBILITY FOR HUMAN RESOURCES</b> Responsibility to assign, monitor and review work of two helpers (2 FTEs).	CD	14
9	<b>RESPONSIBILITY FOR WELL BEING/SAFETY OF OTHERS</b> Significant care and attention to ensure the safety of a heavy mobile drilling rig crew.	D	25
10	<b>SENSORY EFFORT/MULTIPLE DEMANDS</b> Focused attention to detail to frequently observe clearances, terrain and equipment conditions at a diamond drill rig to set up equipment.	C	12
11	<b>PHYSICAL EFFORT</b> Very heavy physical effort to frequently lift and carry heavy pumps, drills, casings, rods and water pump over rough terrain.	F	30
12	<b>SURROUNDINGS</b> Exposure to elements with no shelter almost always.	E	12
13	<b>HAZARDS</b> Significant exposure to hazards from frequently lifting and carrying heavy pumps, drills and equipment.	D	9

Total Points: 519.5

Level: Range 13